[illegible] E-8/ (1908-1909, 1913) [illegible]
[illegible] Chiriguano [illegible]
Chane

Comparative ethnographical studies.

[P. iii]
[pp. i–ii are blank]

2.

THE CHANGES IN THE MATERIAL CULTURE OF TWO INDIAN TRIBES UNDER THE INFLUENCE OF NEW SURROUNDINGS

by

Erland Nordenskiöld

[Title Page]

[illegible] (1900-1906, 1912) 1920
SP10 Chiriguano SP10
Chane SP8

000

[P. iv]

C 71. 18/2

HUMPHREY MILFORD
OXFORD UNIVERSITY PRESS
LONDON EDINBURGH GLASGOW NEW YORK TORONTO
MELBOURNE CAPE TOWN BOMBAY CALCUTTA

[illegible] [illegible] (1900-1909, 1913) 1920
[illegible] [illegible] [illegible]
[illegible] [illegible]

[p. v]

000

To

Consul-General

Axel A:son Johnson, Esq.

Stockholm,

with the author's gratitude and esteem

[P.vii]
[P.vi is blank]

PREFACE.

C
ce
112

As I mentioned in the preface to the First Part of this work, the expenses of publication have been defrayed by Consul-General Axel Ax:son Johnson, Esq., of Stockholm, to whom I have taken the liberty of dedicating this, the second part of my book, as a small token of my appreciation of the interest and kindness he has shown towards my South American researches. I also mentioned in the earlier preface that Consul-General Johnson has in every way tried to further Swedish researches in S. America, above all by granting free passages to all the Swedish explorers visiting that continent on board his comfortable and stately ships.

C
cc
126
127

This work is based on collections made by me in S. America, as well as on the study of material in museums and of books (See Part I). I would remind my readers that these researches have been carried out with the support of Swedish patrons of research-work, notably Arvid Hernmarck, Esq., and Mrs. Ina Smitt.

C
ce
112

CAP

I have to thank several of my friends and colleagues for valuable communications, which I have made use of in one way or another in the present work. These are: Mr. Kaj Birket-Smith of the National Museum, Copenhagen (M. C.), Dr. G. Friederici, Dr. R. Karsten, Prof. Dr. Th. Koch-Grünberg, Director of the Ethnological Museum, Stuttgart, Dr. F. Krause, Ethnological Museum, Leipzic, Dr. J. P. B. de Josselin de Jong, Royal Ethnographical Museum, Leiden, Licentiate Sven Lovén, Prof. Dr. Max Schmidt, Ethnological Museum, Berlin, (M. f. V. B.) and Dr. Max Uhle. Every possible courtesy has been shown me by the Riksmuseum,

220
C
CE
127
[104]

Stockholm, through Prof. C. V. Hartman, Dr. G. Lindblom, and last but not least by its skilled attendant A. Törnblom. The objects described here which belong to the Riksmuseum in Stockholm, are marked R. M. with the number of their inventory, those belonging to the Museum at Gothenburg are marked G. M.

In the last named museum there are, inter alia, collections made by Lieutenant O. Liljewalch and Mr. Otto Thulin. The latter has supplied me with a number of valuable oral particulars which are reproduced in the following.

I am also greatly indebted to Dr. Lars Wåhlin, Head Librarian of the Stadsbibliotek at Gothenburg, for procuring rare books for me to consult and for translations of Latin quotations. As the works of Italian authors occasionally caused me some trouble, since I cannot read Italian fluently, Consul-General E. Cervin was good enough to help me when in difficulties.

The illustrations to this volume are chiefly due to Mr. A. Hjelm and Miss A. Danielsson. Some of the stereotype plates were kindly lent me by Mr. K. O. Bonnier, the publisher of my popular works. Most of the illustrations, however, were made by the Optia Company of this town from pictures not previously published.

The translation into English of my Swedish manuscript was carried out by two translators and revised by Dr. G. E. Fuhrken.

Nordenskiöld E-4,7 (1908-1909, 1913) 1920
SP10 Chiriguano SP10
Chane SP9

CONTENTS.

140

Dwellings 1
Beds and other fittings of the huts 8
Tillage and tillage implements 23
Hunting Equipment 25
Fishing tackle 36
Domestic Animals 42
Tools 50
Fire-making 50
Utensils used in preparing and consuming food 51
Narcotics 58
Dress 60
Articles connected with the deformation of the body. «Tembetas» 72
Toilet-Articles, Tattooing etc. 78
Stained Teeth 85
Ornaments and Knick-knacks 92
Carrying implements 93
Rafts 98
Games 99
Playthings 114
Musical Instruments 120
Dancing Masks 132
Pottery 137
Various kinds of handicraft besides pottery 164
Trophies 180
Property Marks 180
Symbols of authority and dignity 182
Urn-Burial 184
Resumé 196
Bibliography 214
Notes on the Bibliographical maps 237

MAPS.

1. The distribution of pile buildings 5
2. The distribution of the platform bed (Catre) 11
3. Distribution of the hammock 17
4. The distribution of the hunting net 33
5. The distribution of the multi-pointed fishing arrow....... 41
6. The distribution of fishing with poison 45
7. The distribution of the Tipoy 67
8. The distribution of stained teeth........................ 87
9. The distribution of games with india-rubber balls 103
10. The distribution of the trumpet 121
11. The distribution of the pan-pipe........................ 125
12. The distribution of masks............................... 131
13. The distribution of vessels with string-holes 141
14. The distribution of baskets with lids 173
15. The distribution of the «Arawak» loom.................. 179
16. The distribution of urnburial 187
Bibliographical map 1. 1498—1600 230
Bibliographical map 2. 1600—1700 240
Bibliographical map 3. 1700—1800 241
Bibliographical map 4. 1800—1900 242
Bibliographical map 5. 1900—1920 243
Bibliographical map 6. Archaeological literature............ 244

Introduction.

c
ce
114

In Part I of this work I sought by a new method to analyse the material culture of two Indian tribes the Choroti and Ashluslay. In the introduction to the aforesaid work I explained the method employed. In Part 2 I have sought by the same method to make an ethno-geographical analysis of the civilization of two other Indian tribes. These are the Chiriguano and Chané, who dwell in the southernmost part of Bolivia and northernmost Argentina. The Chiriguano are Guarani Indians, while the Chané are Guaranized Arawaks[1]). They thus belong to two of the most important tribal groups in all America. Their civilisation is already well known, thanks to the missionaries who have worked and still work among them. Their works are referred to in the bibliography. The most important are those by Corrado and Nino. Del Campana wrote a monograph on the Chiriguano based on information supplied by missionaries. We also find mention of the Chiriguano in many older works. The information they give us of their manners and customs is unfortunately scanty. It is, indeed, only in Lizárraga, Chomé, Viedma, Lozano and one or two of the Litterae annuea that we find any useful matter.

c
ce
[101]
[131]
[197]

c
.114

Serrano y Sanz wrote an excellent work on the post-Columbian history of the Chiriguano. Outes has written about their pottery. Lehmann-Nitsche has dealt with their physical anthropology. Works on their languages have been published by several missionaries. I visited these

---

[1]) Vide Nordenskiöld (8).

C
114

Indians in the years 1908, 1909 and 1913, and spent in all 4 to 5 months studying them. In my book »Indianlif» I gave a popular account of them as I got to know them during the Hemmarck expedition in 1908 and 1909. In my last book of travel »Forskningar och äventyr i Sydamerika» there is some information about the Chiriguano. I have brought home to Sweden from the Chiriguano and Chané about 1500 articles which are now in the Riksmuseum at Stockholm and in the Gothenburg Museum. In the Geographical Review I wrote a short article on the migrations of the Chiriguano Indians.

C
ce
[126]

C
ce
12
114

A close study of the Chiriguano and Chané civilization by the ethno-geographical method affords points of especial interest, since their mode of life is rather well known, and we are able to trace their history back to the beginning of the 16th century. I have also collected archaeological material from their region. At first I was minded to give an account of this, too, in the present work. I decided, however, that it would be better here only to mention individual finds by the way, and to leave the archaeological material for another publication in which I shall be able also to publish certain archaeological finds made in other parts of Bolivia. This for purely practical reasons.

C
ce
121

I will here endeavour to make clear how the Guarani-speaking Chiriguano's and the Guaranized Chanés' civilization are composed, what culture-elements they have got from the Whites and from the Mountain civilization in the west, what each brought to the common stock and what they possibly obtained from other quarters.

In this analysis of Chiriguano and Chané manners and customs, I do not intend properly to examine the question as to whence these Indians came to their present abodes. Broadly speaking we know that already. Respecting the Chiriguano migrations there are historical documents extant which evidently show that it was not until the beginning of the 16th century that these Indians conquered

C
175
648
127

the tracts they now occupy.[1] [2] They drove out or subjugated the original population, which consisted chiefly of Chané Indians. They made slaves of a great number of them and ravished a great number of women.

c
175
148
167

The Chané are, as was mentioned, Arawaks and all indications point to their having come from the north or north-east, where they have large numbers of kinsfolk. It will be found that the present investigation confirms this. A matter of particular interest in this connection is to notice how two peoples belonging to the most important groups of tribes in all America made adaptations in their mode of life when they had emigrated to places with strange natural conditions. Again, it is worthy of note how their civilization was transformed und the influence of the Bronze-age civilization in the west and afterwards under the influence of the Whites. Further we shall see what they have, under their new conditions, been able to preserve of their original civilization. We shall gain insight into the way in which the civilization of two Indian tribes was transformed under the influence of other peoples and new natural conditions.

Ee
[397]
Ce
101
197
c
Ce
f21
167

As in Part I, I deal chiefly with the »material» side of these Indians' life. Or rather, everything in their life which

Ee
Ce
121

---

[1] Nordenskiöld (13).

[2] Means, basing his opinion on Garcilasso and Montesinos, has assumed that the Chiriguano invaded the Inca Realm earlier than the beginning of the 16th century. But even if his assumption is correct, these inroads led to no domiciliation there. This is evident from the accounts of the invasion in the 16th century, when the Chiriguano supplanted, what was everywhere an original stock. Nor do we know whether by Chiriguano the Incas did not mean barbaric tribes of the Chaco in general, and not any particular tribe. In these parts Chiriguano probably corresponded to the signification that Chunchos had in the district of Cuzco, where it meant all sorts of barbaric Indian tribes east of the Andes. The Chiriguano that Garcilasso de la Vega and Montesinos speak of need by no means have been Guaraní Indians. I have already pointed out (Nordenskiöld 13) that Garcilasso's description of the Chiriguano is absolutely irresponsible.

C
[114]

e
ce
121

can be kept in a museum or for which one may find — given favourable circumstances — archeological comparative material. Besides weapons, ornaments etc there is thus included also burial customs, tatooing, dancing-masks, etc.

c
ce
123

The reader will find that I have endeavoured to make this part more graphic than Part I. From the maps of bibliography it will be seen, regarding what regions I have had access to literature; it can also, in some measure, be seen whether the blanks on the maps are due to those particular tribes never having been closely studied.

The maps of distributions in this work are fewer in number than in Part I. This is because we find the Chiriguano and Chané, or one of these tribes, on twenty-nine maps in Part I. Part I is largely preparatory to Part II. Parts I and 2 together contain 45 maps showing the distribution of culture-elements occuring among the Chané and (or) Chiriguano.

e
ce
121

All who are interested in the ethnography of S. America will, I venture to think, find the maps worth close study and will see that from them various deductions can be made not only respecting the Chiriguano and Chané Indians but also as to the ethnography of S. America in general. In some measure I have, indeed, endeavoured to do this myself.

c
ce
131

The land of the Chiriguano and Chané the Indians streches from near Sta Cruz de la Sierra to near Rio Bermejo. Southwards of Sta Cruz the territory inhabited by the Chiriguano is continuous. The Chané, on the other hand, live in several different quarters, some at the river Itiyuro in the Argentine, some at Caipipendi near the Rio Pilcomayo, some at the Lower Rio Parapiti, and others near Itau south of the Rio Pilcomayo. The neighbours of the Chiriguano and Chané are the Mataco-Vejos, Mestizos, and Whites to the south, the Mataco, Toba, Tapiete, (Yanaygua) and Tsirakua to the east, to the north Mestizos and Whites, and to the west Quichua, Mestizos, and Whites.

c
ce
101
162

Some Choroti live near Yacuiba. In nearly all of the Chiriguano territory there are Mestizos and Whites. There are also several large missionary stations in their territory. Some few Chiriguano live in the village of Sta Rosa to the north of Sta Cruz de la Sierra. Some Chiriguano who sought refuge in central Chaco after their last rebellion, live there still. They are the only tribe of Chiriguano-Indians who are quite independent of the Whites. C 161 162 131 [999]

The country which is inhabited by the Chiriguano and partly by the Chané is a border land between the Andine mountains and the great plain of the Chaco. It is in the valleys between the outermost mountain ridges towards the Chaco and on the plain to the east of them that the Chiriguano and the Chané live. The land of the Chiriguano and Chané-Indians is not a real country of primeval forests. There are some great forests,but on the whole it is sparsely wooded, in places even very poorly wooded. The supply of water is the governing condition for settlement in the land of these Indians. It may be said that wherever there is access to water there the country is inhabited, at any rate as regards the region north of the Rio Grande, one of the great rivers that run through their territory There need not be a great supply of water for the Indians to find the country inhabitable. All that is necessary is sufficient drinking-water for man and beast, as at Itatique and in the Caipipendi valley near Rio Parapiti. C CE 131 135 C CE 361 362

The biggest rivers running through the territory of the Chiriguano and the Chané are the Rio Grande, the Rio Parapiti and above all the Rio Pilcomayo. The Rio Grande may now almost be considered the boundary river of these tribes towards the north,and is of but little importance to them. The Rio Parapiti is a strange river. While well supplied with water in the mountains it is almost shrinks to nothing in the plains during the dry season. During the rains it is very full of water and may be dangerous to ford. Fish are plentiful only in the Rio Pilcomayo, and we C CE 133 C CE [226]

c
ce XVI

133 shall see that the methods of fishing differ somewhat in
226 the different rivers. At the Rio Pilcomayo the Indians must
always have found a good supply of food. As many Chiriguano
live by very insignificant streams they never have
c the opportunity of fishing. The Chané all live in places
ce where they are able to procure fish during some part
[361] of the year at least.

c Big game is scarce in the land of the Chiriguano and
ce Chané. Nor are these Indians keen huntsmen. One seldom
224 sees game that has been killed by them in their huts.
c
ce The great flocks of fat pigeons that settle in their fields are
[223] for the most part left unmolested.

c
ce As we shall see in the following the Chiriguano and
241 Chané live mostly by tilling the ground. Owing to the
243 comparative dryness of their land maize is cultivated more
than anything else. It is the ease with which this plant
can be grown here, that makes the land of the Chiriguano
and Chané a good land to dwell in.

c
ce The fruit of the carob-tree (algarrobo) is the most im-
222 portant wild fruit. Probably no careful study has ever
c been made of the climatic conditions of the Chiriguano and
ce Chané country. It is situated in the tropics, north of the
132 tropic of Capricorn and the traveller there of course suffers
more from heat than cold. In May and June especially,
however, when there is a strong south wind, it is agreeable
to have a well built house, warm clothes and a snug bed.
c
ce The rains begin in December and leave off in April or May.
It sometimes happens that there is little or no rain and then
[241] the crops are a failure. They are often destroyed by grasshoppers.

C
343

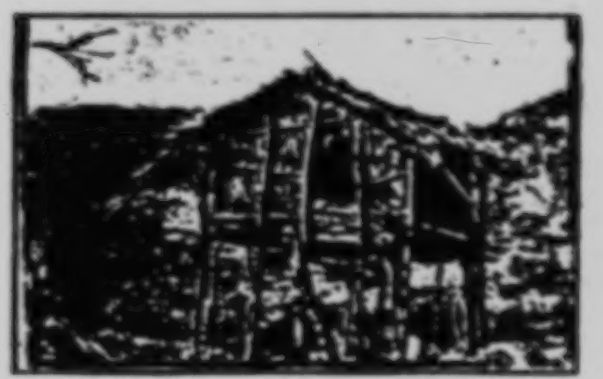


Fig. 1. Maize-barn.
Chiriguano.

I.

Dwellings.

Like all other Indians I visited south of S^ta^ Cruz de la Sierra in Bolivia, the Chiriguano and Chané live in villages. Some of these villages are rather large and inhabited by several hundred people. Frequently a number of villages are situated quite close to each other. As a rule, the huts stand around an open space which is sometimes planted with trees to give shelter. These squares serve as meeting-places and playgrounds. c cc 361

The huts are square. They are built of reeds or wooden laths, and thatched with grass. They are very often plastered with earth. c ca 342

There are no huts here of the original Indian shape. The real Chiriguano (Chané?) huts were very large; as many as a hundred people lived in the same house, the whole c ce [592] [361]

2

c ce 342 [592] [171] village consisting of only a few big huts.1) These plainly correspond to the great family-houses known to us from Brazil, but which in Bolivia I have only seen among the Chacobo, a Pano tribe on the Lago Rojo-Aguado. Chomé2) gives no exact information about the huts. He says they stood in a circle around an open place. In the middle of the square there was a special hut for strangers. According to Nino3) the Chiriguano formerly had round houses. He gives a rather lengthy description of these, but does not tell us the source of his information. Nino describes at length how the Chiriguano now build their houses.

c ce 361 342 [609]

c ce 342 177 As early as the time of Viedma4) — end of the 18th century — they seem to have forsaken their original type of house and built themselves smaller huts. Since the dwelling-houses here retain no traces of their original shape, it is useless to make comparisons with other Indian huts. There is hardly anything in Indian culture which so quickly changes under the influence of the Whites as the houses. The acquisition of iron tools makes it possible to put up quickly properly built houses. An Indian tribe need consequently not have been long in contact with the Whites before they alter the style of their huts. This is not the case, to be sure, with all the tribes, for many, such as those in the interior of the Chaco, tenaciously preserve the primitive type of hut which, though small and inconvenient, affords greater protection from cold than the roomier dwellings of the Whites.

c ce [171] It would be of interest to find out in what measure

---

1) Annua de la Compañía de Jesús — Tucuman y Perú — 1596. «El mayor de los pueblos es de cinco casas; lo común es de tres; mas son muy largas, de más de 150 pasos, á dos aguas, con estantes en el medio sobre que se arma la cumbrera, y de estante á estante vive una parentela.» Lizárraga P. 332.

2) P. 313. «Pendant ce temps-là, je n'avais pas d'autre logement que le toit de paille qui était au milieu de la place.»

3) P. 174.

4) P. 181. «Sus casas son unos pequeños ranchos hechos de caña.»

the earth-plastering of huts is here an original Indian idea. I have attempted to indicate on a map the distribution of huts with earth-plastered walls, but I refrain from publishing it because, in the majority of cases, I cannot ascertain whether the Indians learned from the Whites to plaster their huts. Huts with earth-plastered walls are found among the Indians around Roraima in Guiana[1] and among the Ijca[2] in Colombia. The Indians at Mojos[3] used to have such huts, and OUTES[4] mentions them from the Caingua etc. Earth-plastered mestizo huts are also common in the Mizque valley in Bolivia.

ℰ
CC
342
197
171*
[114]

The Chané on the Rio Itiyuro, but not those on the Rio Parapiti, and the Chiriguano have maize-barns on piles.[5] Occasionally the barn and dwelling-house are combined in such wise that the people live on the ground-floor and store their maize on the floor above. During my travels I have only seen barns on piles among the Mataco-Guisnay (one only), Mataco Vejos, and the Chacobo (one only). Some Quichua huts between the Rio Chapare and Cochabamba are built on piles. I scarcely think these are original, however.

ℰ
CC
343
342

ℰ
CC
[171]*

JOHANNES LEHMANN has written a treatise on pile-buildings all over the world. He mentions there their occurrence among several tribes in northern S. America, which are shown on the map below. The village on piles from La Plata mentioned by LEHMANN after HERBELI is, of course, not Indian; nor are the barns from the Argentine

ℰ
CC
343
114
171*
342

---

[1] Thurn.

[2] BOLINDER (3). P. 55.

[3] MARBAN P. 133; CASTELNAU, P. 308.

[4] OUTES Y BRUCH (3) P. 63.

[5] Already LIZÁRRAGA (P. 000) speaks of the maize-barns of the Chiriguano: «No dormian en el buhio, sino fuera, los españoles seguros con unas piruas de maiz junto al buhio (pirua es un cercado como de dos varas de hueco, redondo de cañas, donde se encierra el maiz).»

South American Indians
53

4

C
C2
343 Pampas in which the corn is stored to protect it from
114 harm.
*171 The above-mentioned village and barns I have,
342 therefore, left out of my map. Pater Schmidt[1]) mentions pile-buildings from other tribes too.

Friederici[2]) has also collected numerous statements referring to the occurrence of pile-dwellings in S. America from the works of older writers.

C
Ec. The table 1 and map 3 which follow show the distribution
•171 of pile-buildings in S. America according to Lehmann,
342 Friederici and Pater Schmidt, together with some additions and corrections.

114 On the accompanying map I have merely indicated
343 those which seem certainly to be of Indian origin. Those
5 mentioned at the end of the 15th century, as well as those
342 from the 16th are so undoubtedly. I am convinced that the
343 pile-buildings of the Chané and Chiriguano are genuinely Indian, as nowhere in this region do the Whites possess such barns. Their geographical distribution leads us to presume their genuinely Indian origin, as also that they
C
CC are a culture-element which came to these Indians from
343 the swamps of Mojos, and that they here are an Arawak
114 culture-element too. The use of pile-buildings on
342 hard ground is quite comprehensible to me, as they offer great advantages, whether used for barns or dwelling-houses. The idea must have come, however, from some marshy tract or from a sea-coast where the inhabitants were dependent on ebb and flood tides. In the cases where a people employ pile-buildings on hard ground which is not liable to floods, it is due, as a rule, to conservative ideas — the mode of building to which they were accustomed in their former dwelling-places has become indispensable.

---

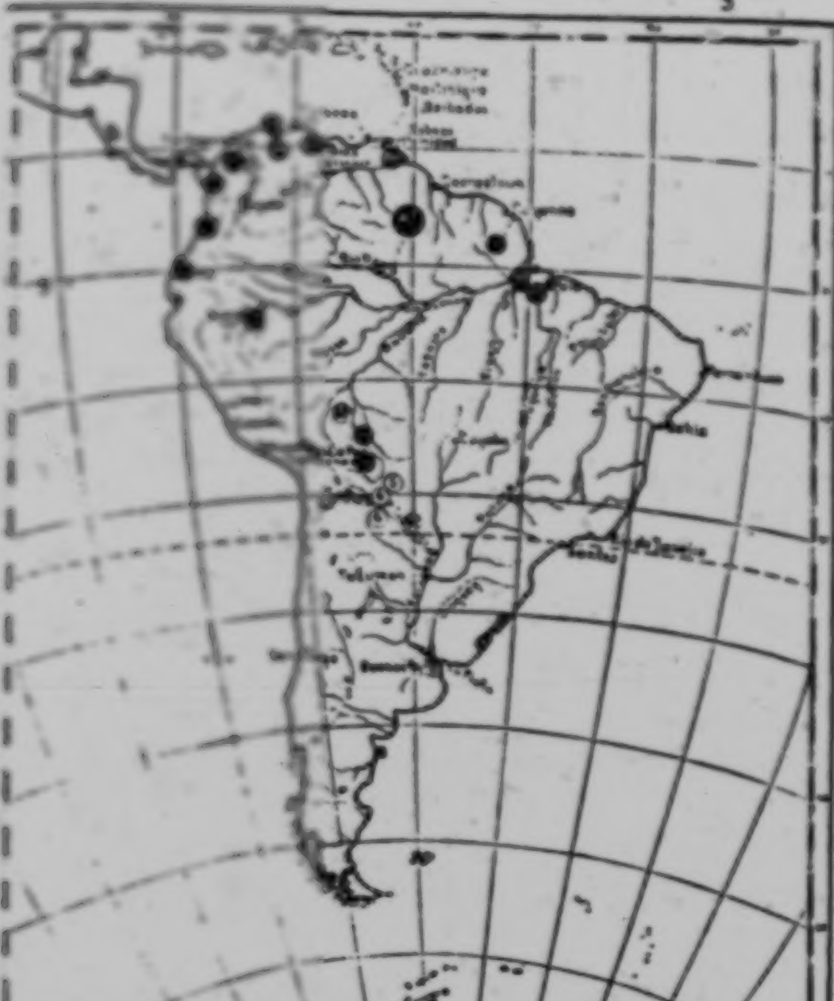
[1]) P. 1064.
[2]) (a) P. 48.

[illegible] E-5 (1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF6
South American Indians S3

S

C
CE
171*
162
342
343
131

S
342
343
162



Map 1. The distribution of pile buildings.

● = Dwelling-houses.
○ [illegible]

e
ce
191
342
343
114
c
ce
[217]

The notion that the pile-buildings employed as barns are here of different origin from those used as dwelling-houses, is unlikely. There is nothing in the geographical distribution to support this idea.

Outside their barns the Chiriguano and Chané have ladders consisting of logs in which steps have been hewn.

Table 1.

Pile buildings. Map. 1.

e
ce
191
342
343
102
5
102
342

4. Chiriguano.
5. Chané.
6. Mataco-Vejos. Have evidently copied the Chané barns.
18. Quichua.
25. Mojo, Marban P. 132. Cooking-shed.
39. Goijiro, Pater Schmidt P. 1064. (after Ernst); Paraubano, Jahn.
47. Indians Roraima: Wapisiana, Arecuna, Macusi, Patamona. Pater Schmidt P. 1064; Thurn.
62. Chacobo.
68. Omagua. »Hicieron los indios dentro de sus mismas casas unos tablados de madera, que ellos llaman Iunas y encima de ellos estuvimos tres meses, que fueron los de Abril, Mayo y Junio con más de seis palmos de agua debajo.
    Entraban y salian las canoas dentro de las casas, y de noche quedaban de bajo de los tablados.» Laureano de la Cruz P. 88; [Maroni] Vol. XXX. P. 197.
92. Indians on the west coast of Columbia. Pizarro P. 204; Cieza de Leon (1) P. 95; Oviedo T. 3. P. 8; Andagova P. 76; Robledo P. 277.
3 F. Barbacóa, Rivet (4) and Verneau P. 36.
4 F. Indians on and near Lake Maracaibo. Navarrete T. III. P. 8; »A quatro dias llegaron à un pueblo de güerigue-

Nordenskiöld E-4,V (1900-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF9
South American Indians. S

C
CR.
342.
343
171a
102.
5
102.
342.

rio, que esta armado sobre madera en el agua en unas ciénegas del mismo rio». Oviedo T. 2, P. 293. (See also P. 294 and P. 300); Tolosa P. 229.

5 F. Indians at the mouth of the Amazon. «A cabo de seis dias de navegacion tomaron una isla en un puerto y ensenada que el rio hacia en ella, y como tres tiros de arcabuz, por este puerto y ensenada arriba, dieron con unas casas fuertes, armadas sobre gruesos y recios estantes que tenian hincados en el propio cabo desta ensenada de rio o estero que allí se hacia .... sobre estos estantes o pilares estaban unas salas de tablas de palmas bravas ...» Ortiguera P. 372.

6 F. Indians near Para. «desquels demeurent dans les Iournas qui sont des maisons faictes à la forme des Ponts aux Changes et de sainct Michel de Paris, assises sur le haut de gros arbres plantees en l'eau.» Evreux P. 28. The civilised Indians in the same region still live in pile-buildings. Koch-Grünberg (2) T. 1, P. 3; Lange, Several illustrations.

7 P. Oyampi, Pater Schmidt P. 1064. (after Coudreau); Palicours, Fauque P. 359.

8 X. Warrau, Pater Schmidt P. 1064; Raleigh P. 50; Level P. 60.

9 C. Mataco-Guisnay. (I saw one single barn on piles among these Indians).

1 R. Indians, Darien. Oviedo T. 2, P. 455.

2 R. Caquetios, Federmann P. 191.

Not on the map Galibi, French Guiana. Lombard P. 298.

• Indians Cayambe, Ecuador. Friederici (5). P. 99 (After Montesino and others.)

Pile buildings are among the culture-elements where it is sometimes difficult to decide whether they are Indian or not. In the rubber forests of Bolivia, Peru and Brazil, at favourable spots, are many barracks built on piles. The-

S
342.

5
342 RESE OF BAVARIA[5]) depicts numerous pile-buildings from the town of Guayaquil and its surroundings. On the lower Amazon the Indians and Mestizoes in general live in pile-buildings.[6])

II.

Beds and other fittings of the huts.

C
Ce
352
177 The Chiriguano and Chané make use of platform beds as well as hammocks. The bedsteads are made of thick sticks, the underlay being covered with cane or long sticks. The most civilized Chiriguano also have bedsteads in which the underlay is made of plaited things — this having been learned from the Whites. I had always held that the platform bed was a culture-element which the Indians have obtained from the Whites. KARL V. D. STEINEN[7]) seems also to be of this opinion. This is not, however, correct, for the platform bed is a genuine Indian culture-element, which is worth closer study. Platform beds are mentioned as early as 1549 by PALOMINO[8]) from Chuquimayo in N. Peru among quite unvisited Indians, and there is not the least reason to suppose that the platform bed

---

[5]) (2)

[6]) «Nos logares alagados de beira rio, como certas praias do Amazonas entre o Pará e Gurupá e em todo o litoral do archipelago de Marajó, ao menos na parte a O e SO d'esse archipelago, erguem as casas sobre paliçadas á maneira das cidades lacustres dos tempos prehistoricos ......» VERISSIMO P. 370.

[7]) (5) P. 75.

[8]) P. XLIX «Duermen en barbacoas sobre unos petates de caña.»

is a culture-element so constituted as in a few years to have spread from the Whites in Peru to the interior of the country. When the distribution of the platform bed is closely studied, it will be found that it is evidently a very old culture-element which remains in places where the hammock has not penetrated or has been found unpractical. In the land of the Chiriguano and Chané Indians it is often too cold to sleep in hammocks. A platform bed is therefore preferred by them, especially when they have clothes to put under and over them. Hammocks are few and are mostly used to recline upon during the day. I have endeavoured on the map to show the geographical distribution of the platform bed. The summary does not, however, pretend to be complete. Its aim is mainly to draw attention to a culture-element which has often been overlooked, and which gives me the impression of being older than the hammock by which it has been relegated to certain tracts, particularly on the eastern slopes of the Andes, where it is rather cold to sleep in hammocks, and rather uncomfortable to sleep on the ground, as is the custom up on the high fells or farther to the south.

C
CE
362
177

C
CE
362
171*
SF
102
S
102
352

Table 2.

The platform bed (Catre). Map 2.

Se
352
171*
102
5
102
352

4. Chiriguano.
5. Chané. Fig. 2.
18. Quichua, Riobamba, Rivet (2) P. 60.
21. Caingua, Ambrosetti (7) P. 697.
22. Yuracare.
23. Churapa.
24. Chimane.
29. Caingang, Ambrosetti (1) P. 325. Is considered to be post - Columbian
34. Jivaro, Rivet (1) P. 40.
35. Chimila, Bolinder (4) P. 52.
36. Ijca, " (4) P. 48. Only the medicinemen.

[Text continues on P.12]

[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] Chiriguano
Chane [illegible]

[?4]

152
171
157
322
342
416

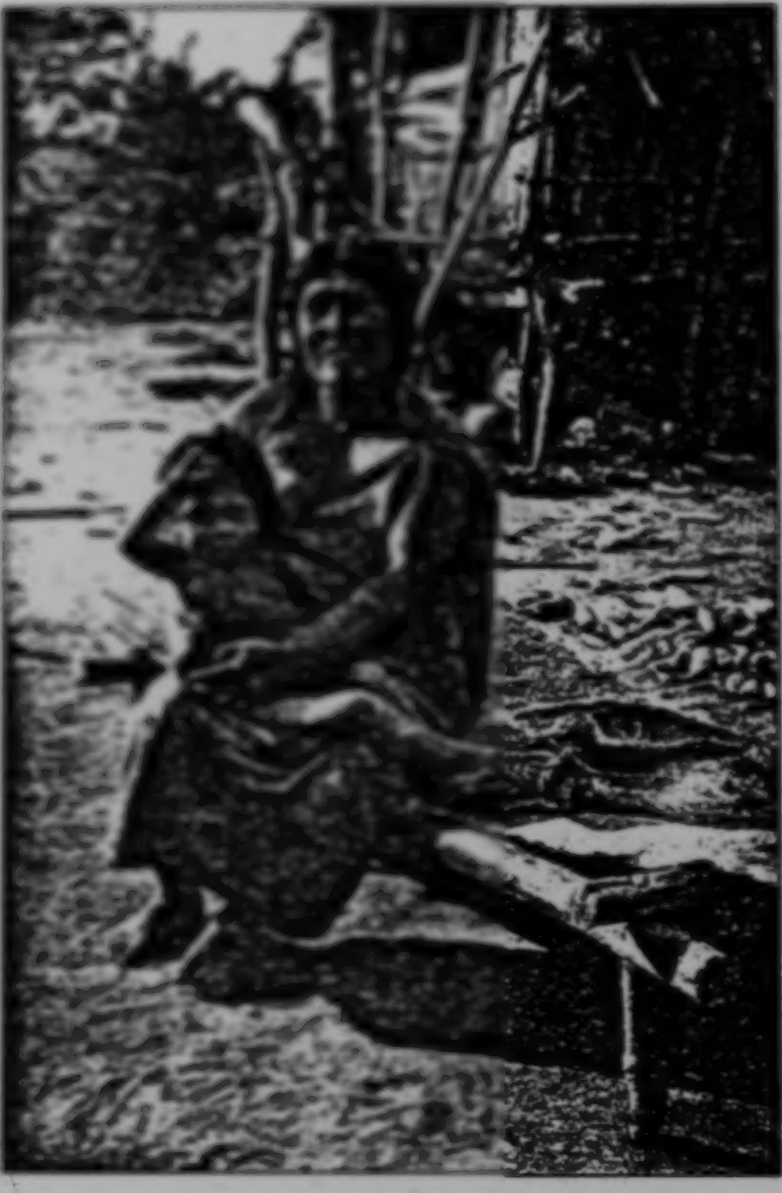


Fig. 1. Chanewoman with a child sitting on a seatree.
Rio Itiyuro.

Phot. E. N—4.

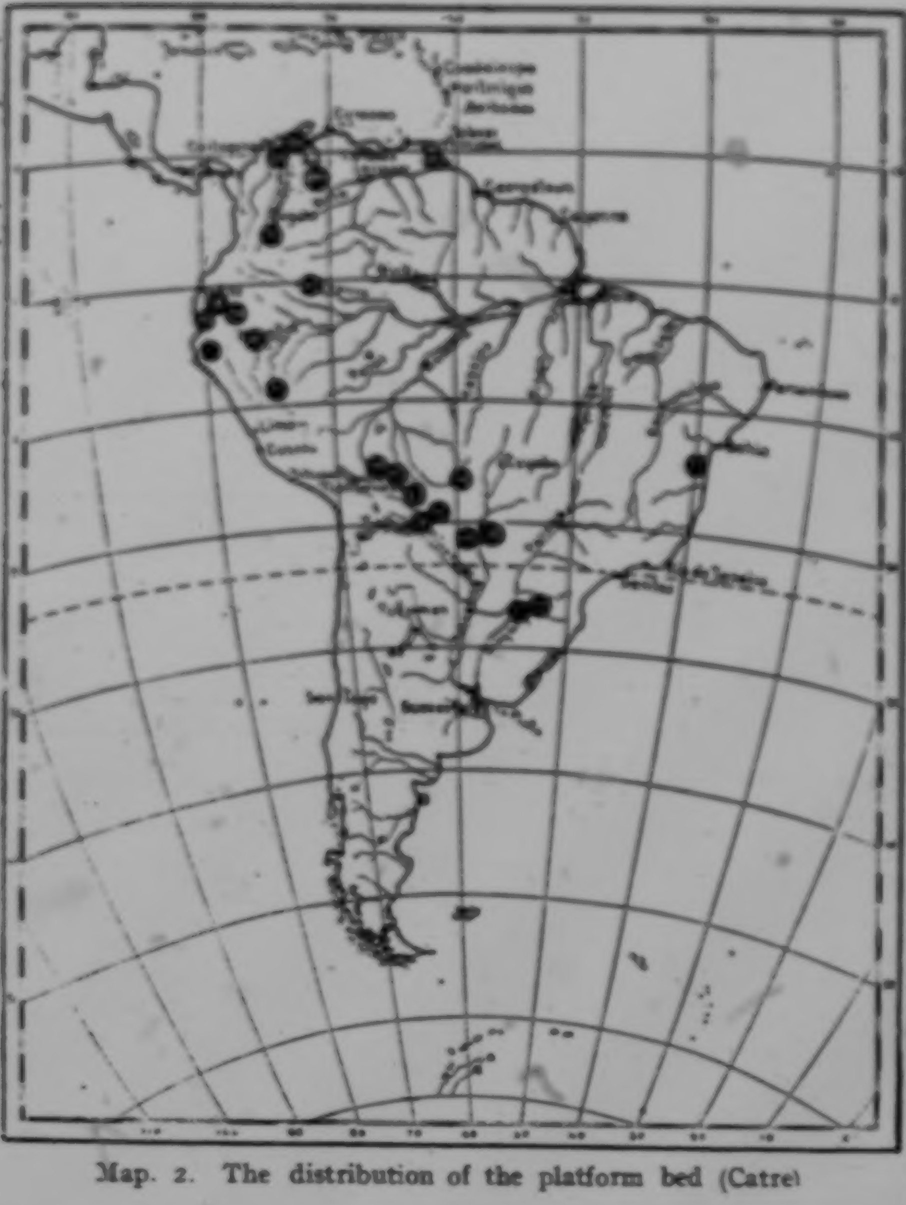
Nordenskiöld [illegible] (1908-1909, 1913) 1920

SF10 Chiriguano SF10

Chane SF9

South American Indians 53

C
Ce
102
352
171
S
102
352



Map. 2. The distribution of the platform bed (Catre)

South American Indians 53

C
CE
352
171
102
9
182
352

66. The Apaporis Indians, WHIFFEN P. 47.
71. Sipibo, STEINEN (8) P. 75.
94. Chiquitos, *Litterae Societatis Jesu* 1594—1595. P. 734; BURGOS P. 343. The men have hammocks, the women platform beds. This implies that fixed bedstead here are more original than hammocks.
95. Chibcha, OVIEDO T. 2. P. 407.
IV. Guaná (Arawaks), AZARA (1) T. 2, P. 89.
3 H. Indians on the coast of Ecuador, BENZONI P. 445.
4 H. Camacans, MARTIUS (1) P. 345.
6 V. Guaná, COMINGES P. 178.
7 V. Indians of Chuquimayo, PALOMINO P. XLIX. He made his journey in 1549.
8 M. Indians (Chamas), Sierra de Merida. SALAS P. 262.
9 P. Xeveros, CHANTRE y HERRERA P. 143. Mainas, SAAVEDRA P. CXLIV. »Duermen en barbacoas ó cabinas con toldos.«

C
CE
352
171
283

In the regions I visited it was only the Siriono, Huacuyana and Huari who had hammocks of palm-fibre or bast. The other tribes who employ this form of bed have hammocks of cotton. The Chané hammocks are of cotton or caraguata[1][2]. The Chiriguano have hammocks of cotton, occasionally of wool. IM THURN and K. v. D. STEINEN had already pointed out that, while cotton hammocks appear to be a Carib culture-element, the palm-fibre hammock is of Arawak origin. PATER SCHMIDT then thoroughly investigated the distribution of hammocks of various materials, confirming the theories of IM THURN and K. v. D. STEINEN and shewing, moreover, that the Guarani peoples, as a rule, have cotton hammocks.

---

[1] In net-technique.

[2] Annua de la Compañía de Jesus. P. CIV. The author speaks of two kind of hammocks from these Indians. Probably one of them were of Caraguatá. I am not quiet sure if he speaks of the Chané or the Chiriguano or of both »hincan muy grandes palos y de ellos cuelgan sus hamacas, que son unas mantas grandes ó tejidos de algodon ó hechas de red.«

C
ce
362
171*
283

Ruth Haebler, a pupil of **Max Schmidt**, has endeavoured to shew that this is not correct. After examining a number of hammocks in German museums, she arrived at the conclusion that, in the majority of these, both palmfibre and cotton had been used — palmfibre for the warp and cotton for the woof — and that the notion that the Arawaks have hammocks of palm-fibre only, while Caribs have only cotton hammocks, is wrong. For the rest, hammocks of mixed materials are also mentioned by **Pater Schmidt**, who thus devoted attention to this matter when he was investigating hammocks. **Roth**, too, mentions from Guiana hammocks of bast with a woof of cotton. The fact really is that all the hammocks described as having a bast warp and cotton woof are from the Upper Xingú or from Guiana tracts, where there dwell Arawaks, Caribs and Tupi. If we study the appended map and table, which are based on very extensive material, we shall find that, within an immense region about the Amazon, the Indians use hammocks of palm-fibre exclusively, and that in the rest of S. America it is more especially the least civilized. tribes, e. g. Siriono, Huari, Waika and others, who use bast or palmfibre hammocks exclusively. On the coast of Brazil, the more civilized Tupi had cotton hammocks, while the less civilized tribes used palm-fibre. I would consequently account for the distribution of hammocks of different materials in the following way: — Originally the Indians in the whole of tropical S. America had hammocks of palmfibre or bast exclusively. When the art of cultivating cotton spread from the west, many tribes began to use cotton hammocks or, in some districts, hammocks of palm-fibre with a cotton woof. Where cotton-growing remained unknown, or was inconsiderable, as among the Arawaks of N W Brazil, hammocks made entirely of palm-fibre were still used.

C
ce
[249]

Which tribes spread the knowledge of cotton growing? Certainly not the Arawaks, who within large tracts

C ce 352 249 *171 283 do not even spin. It must, above all, have been the Tupi - Guarani. They are known for their manufacture of cotton hammocks. The Omagua who dwell (have dwelt?) in a tract where they and the Cocama are the only Tupi Indians, use hammocks both of palm-fibre and of cotton. All the neighbouring tribes have nothing but palm-fibre hammocks. Some Tupi at the Upper Xingú use palm-fibre hammocks with a woof of cotton. **Ruth Haebler** mentions two hammocks of bast from the Cainguá. Otherwise, the Tupi tribes use cotton hammocks, as has been pointed out by **Pater Schmidt**. The Caribs, too, have undoubtedly contributed to the spread of cotton-growing and the use of cotton hammocks, for it is very evident that in Guiana especially, they have used, and still use, cotton in their hammocks far more than the Arawaks. The distribution of cotton hammocks in S. America cannot be properly understood except in connection with the general history of the cultivation of cotton. It is highly probable that it was from the western area of civilization in S. America that the knowledge of cotton-growing spread over a C ce [174] considerable part of the continent. It is very likely that, in post-Columbian times, the practice of growing cotton has spread to a good many tribes who formerly were ignorant of it. We must remember that cotton has been grown at such mission-stations as in Mojos on a very large scale.

C ce 352 249 *171 It must also be remembered that the history of the cultivation of cotton is of especial interest, because the cotton bush is one of the few cultivated plants that in pre-Columbian time were common to both the Old and New World. Consequently, it would be very interesting if we could prove that cotton was first used in S. America within the old culture areas, and there only after the Indians had reached a comparatively high state of civilization.

C ce 352 *171 [554] It is not quite right to say that the hammock was not used within the culture-area of the west. It was used — not as a bed, but as a litter for persons of rank. This is

c
ce
352
171*
[554]

corroborated by the accounts of PEDRO PIZARRO and XERES, who were eyewitnesses of the conquest of the Inca empire. In the high mountain country it is natural that hammocks should not be used as beds. In such parts they would be too cold. It is harder to make out why hammocks were not used in the coastal regions of Peru.

Evidently the hammock in S. America is so old a culture-element that it is impossible to decide whence it came to the Chané and Chiriguano. The latter certainly, and most likely the former too, used hammocks when they settled in their present territory. The technique employed in most Chané and all Chiriguano hammocks is the same as, with small variations, is mostly used wherever hammocks occur.

It is possible that some tribes about the river Amazon preferred palm-fibre hammocks to cotton ones, because the former are cooler. Possibly, too, in these regions of moist heat, hammocks of palm-fibre are less liable to rot and to be attacked by insects than those of cotton.

I here append a map (3) showing the distribution of hammocks of different material after PATER SCHMIDT, with certain additions, as will be seen from table 3.

The seat so characteristic of the Indians in great parts of S. America is a rather uncommon piece of furniture in the huts of the Chiriguano and Chané (Fig. 3). Its distribution in S. America has been investigated by PATER SCHMIDT[1]) and SAVILLE[2]) wherefore I beg to refer to their works. In my own sphere of work I saw seats among the Quichua mestizoes at Calilegua, among the Mojo, Huari, Baure and Huanyam. The seat as a culture-element has its southern boundary here. It occurred, though rarely, among the Incas, where seats seem to have been the special privilege of the chiefs[3]). Most likely it is a culture-element which the Chané

c
ce
[127]

c
ce
[622]

---

[1]) P. 1088.

[2]) V. 2, P. 103.

[3]) COBO Vol. 4, P. 172.

C ce 352 *[171] C [177] received from their kinsfolk at Mojos, or they may even have brought it with them when they migrated to their present abode. Nowadays the Chiriguano and Chané commonly use chairs of the type they have learned from the whites. They are made by themselves in the missions.

C ce [237] I have a rush mat from the Chané. Both the Chiriguano and the Chané have skin mats. I have already spoken of such mats in Part I of this work. The skin mat is naturally a southern culture-element.

C, ce 353 C ce *[171] [415] The Chiriguano and Chané keep their belongings either hung from the ceiling or else on the floor. Clothes and other fragile things are often kept in large earthen vessels — a method of keeping one's belongings which I have not seen anywhere else. Cobo[1]) says that the Incas kept their clothes in a similar way.

C ce 353 *171 It is very common among the Chiriguano and Chané to fix wooden hooks in the roof of their huts on which to hang their belongings (fig. 4). Elsewhere I have only seen these hooks among the Churápa. In the Gothenburg Museum there is a collection by Liljewalch and Thulin of hooks made by Indian tribes on the Roraima. The only mention of them that I am aware of in literature on the subject is from the Araucanians.[2]) Small articles of this kind are, of course, easily overlooked, wherefore it is not at present possible to draw a map of their distribution. This is to be regretted, as the distribution of such small objects would offer points of great interest. It seems to me not unlikely that the wooden hook is an Andine culture-element. Within my sphere of work the hook does not occur among other Indians than those mentioned here.

C ce 353 415 Small articles are kept by the Chiriguano and Chané in cloth and leather bags, wooden boxes, baskets, armadillo scales, the scrotum of bulls, and in calabashes with or without lids.

---

[1]) Cobo Vol. 4. P. 171.

[2]) Latcham (1) P. 338.

[Text continues on P.22]

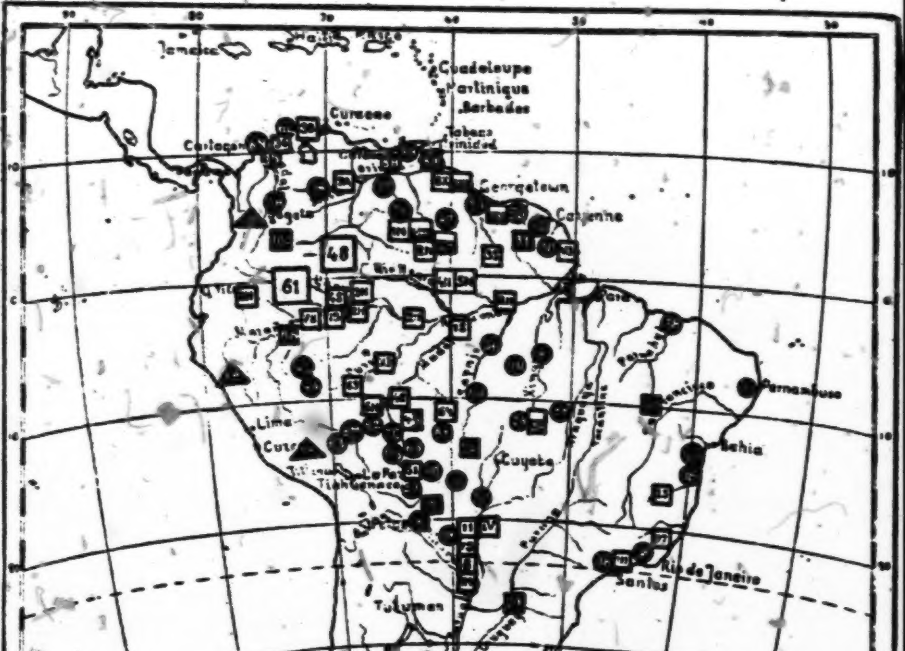
5:Nordenskiöld E-5,4 (1908-1909, 1913) 1920

SF10 Chiriguano SF10

Chane SF8

South American Indians 53

C
Ce
102
283
352
*171
S
102
352


Jamaica
Guadeloupe
Martinique
Barbados
Curacao
Tobago
Trinidad
Cartagena
Georgetown
Cayenne
Bogota
48
61
Quito
Para
Pernambuco
Bahia
Lima
Cuzco
La Paz
Tiahuanaco
Cuyaba
Rio de Janeiro
Santos
Tucuman
Santiago
Buenos Aires
La Plata

Map 3. Distribution of the hammock.

Hammock used as a bed.

● = of cotten, ☐ = of palmfibres or bast, ▮ = warp of cotton, woof of bast,
▪ = warp of palmfibres, woof of cotton, ■ = either of cotton, palmfibres or bas

▲ = *Hammock used as a litter.*

Nordenskiöld E-5(1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8

[p.18]

South American Indians S3

C
Ce
283
352
*171
S
352
102

Table 3.

The distribution of the hammock.
Map. 3.

Number on the map.	Names of the tribes		Cotton	Warp of cotton. Woof of bast	Warp of palmfibres Woof of cotton	Palmfibres or bast		
4	Chiriguano	Southern Bolivia	+	—	—	—?	Tupi	Also of Wool. R. M. E. 1036.
5	Chané	»	R. M. P. 126	—	—		Arawak	
8	Lengua	El Gran Chaco	—	—	—	+		Pater Schmidt P. 1069.
11	Chamacoco	»	—	—	—	+		»
20	Paressi		+	—	—	+	Arawak	Ruth Haebler P. 14.
21	Cainguá	Misiones	+ ¹)	—	—	+	Tupi	» »
23	Churápa	Bolivia	G. M. Tj. 78	—	—	—		R. M. Tj. 72.
25	Mojo	»	+	—	—	—	Arawak	Private Collection.
28	Bakairi	Matto Grosso	+	—	+	—	Carib	Ruth Haebler P. 11.
»	Kustenau	»	+	—	+	—	Arawak	» »
»	Auetö	»	—	—	+	—	Tupi	» »
»	Kamayura	»	—	—	+	—	»	» »
»	Mehinakú	»	—	—	+	—	Arawak	» »
»	Trumai	»	—	—	+	—		» »
31	Ojana, Trio	Guiana	+	—	—	+	Carib	Goeje (1) P. 21.
35	Chimila	Colombia	G.M. 16.3.30	—	—	—	»	Bolinder (4) P. 51.
36	Ijca and Köggaba	»	—	—		G.M. 16.3.783		»
38	Tupinambá, Tupinikin, Carios	Coast of Brazil	+	—	—	G.M. 13.3.58 —	Tupi	Pigafetta P. 8, Staden T. 2, P. 8; d'Abbeville P. 203; Pater Schmidt P. 1064
39	Goijiro	Colombia	—	—	—	+	Arawak	Pater Schmidt P. 1070.
40	Guarayú (Guarayos)	Bolivia	G. M. G. 100	—	—	—	Tupi	
41	Guarayú (Pauserna)	Matto Grosso	G.M. 13.1.844	—	—	—	»	
42	Caripuna	Rio Madeira	—	—	—	+		Pater Schmidt P. 1068.
43	Huanyam	Rio Guaporé	—	G.M. 13.1.601	—	G. M. 13.1. 611		
47	Macusi	Guiana	+		+		Carib	Thurn, Orally communicated. Pater Schmidt P 1067, Farabee, P. 24.

C
Ce
283
352
#171
S
102
352

Nordenskiöld E-8,V (1908-1909, 1913) 1920
SP10 Chiriguano SP10
Chaco SP8

[p.19]

South American Indians 53

»	Patamona	»	G.M.02.18.16, 121-122	—	—		»	Thalw
»	Arecuna	»	+		—	—	»	»
»	Wapisiana	»	+	—	—	—	Arawak	Ruth Haebler P. 14.²)
48	Hianacoto	N. W. Brazil	—	—	—	+	Carib	» »
	Siusi	»	—	—	—	+	Arawak	» »
	Uaupé	»	—	—	—	+		» »
	Baré	»	—	—	—	+	Arawak	Pater Schmidt P. 1068.
	Kobéua	»	—	—	—	+		» »
51	Siriono	Bolivia	—	—		G.M.S. ⊢⊣		
55	True Carib	Guiana	+	—	—	—	Carib	Mocquet, P. 116., Grillet et Bechamel, P. 163³)
56	Mundrucú	Rio Tapajos	+	—	—	—	Tupi	Pater Schmidt P. 1069.
60	Apiacá	»	+	—	—	—	»	» »
61	Ultoto, Boro, Karahone⁴) etc.	Rio Putumayo and Rio Yapurá	—	—	—	+		Pater Schmidt P. 1069; Whiffen P. 97.
62	Chacobo	Bolivia	R.M.Ch. 189	—	—	—		
63	Yamiaca	Peru	R. M. 03. 16. 490	—	—	—		
64	Huari	Matto Grosso	—	—	—	G.M.15.3246		
65	Baure	Bolivia	+	—	—	—	Arawak	
68	Omagua	Upper Amazonas	+	—	—	+	Tupi	Pater Schmidt P. 1069.
69	Ipurina	Rio Purus	—	—	—	+	Arawak	Ruth Haebler P. 14; Also of bark. Pater Schmidt P. 1070.
75	Angaité	El Gran Chaco	—	—	—	+		Cominges P. 144.
77	Tapirapé	Near Rio Araguaya	+?	—	—	—	Tupi	Pater Schmidt P. 1069.
79	Yekuaná	Rio Merevari	+	—	—	—	Carib	Ruth Haebler. P. 14.
90	Acipoya, Curuahé	Between R. Xingú and Rio Tapajos	+	—	—	—	Tupi?	Pater Schmidt P. 1069.
94	Chiquitos	Bolivia	+	—	—	—		My own observations.
97	Puri	Near Coast of Brazil	—	—	—	+		Pater Schmidt P. 1068.
99	Cumanagoto	Coast of Venezuela	+	—	—	—	Carib	Pater Schmidt P. 1069 (After Ruiz Blanco), Benzoni P. 10.
4A	Tauaré	Upper Rio Purus	+	—	—	—		Pater Schmidt P. 1069.
7A	Achagua	Venezuela	—	—	—	+	Arawak	» P. 1068.

---

[1] «Algunos pocos tienen pequeñas y estrechas hamacas de algodon que tejen, las que usan mas bien de asientos ó cunas para las criaturas que de camas.» Ambrosetti (7) P. 1017.

[2] «Very small hammocks are made of one piece of bark tied at the ends with a rope. Farabee, P. 20.

[3] «Tous les Hamacs . . . qui se font depuis la Riviere des Amazones jusques à Orenoc sont de cotton». See also H. ten Kate. P. 106.

[4] Carib.

C
Ce
283
352
*171
S
102
352

SeNordenskiöld E-6(1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF6

[p.20]

South American Indians S3

Table 3.

The distribution of the hammock

Map 3.

Number on the map	Names of the tribes.		Cotton	Warp of cotton. Woof of bast.	Warp of palmfibres Woof of cotton.	Palmfibres or bast.		
1B	Ticuna	Upper Amazonas	—	—	—	+		PATER SCHMIDT P. 1068.
7C	Itonama	Bolivia	+	—	—	—		PATER SCHMIDT; My own observations.
6E	Indians of	S:a Marta	+	—	—	—		OVIEDO T. 2, P. 354.
1H	Wayanasses	Ilha Grande, South of Rio de Janeiro	—	—	—	+		KNIVET P. 1228.
1H	Indians	Rio Amazonas	—	—	—	+		(TEIXEIRA) P. 445.
6H	Paraguara	Bolivia	—	—	—	+		ARMENTIA (2) P. 125.
7H	Indians	Upper Rio Opon	+	—	—	—		AGUADO (1) T. 1, P. 212.
8H		Northern Venezuela	+	—	—	—		SIMON (1) P. 583.
4L	Cashinauá	Rio Yuruá	+	—	—	—		RUTH HAEBLER P. 14, CAPISTRANO DE ABREU P. 35.
6M	Toromona	Bolivia	+	—	—	—		RUTH HAEBLER. P. 14.
7M	Guashiguas	Venezuela	+	—	—	—		AGUADO (2) T. 1. P. 242.
9M	Schirianá	Rio Uraricuera	—	—	+	—		KOCH-GRÜNBERG (4) T. 1. P. 172.
1N	Waika	Rio Uraricuera	—	—	—	+		KOCH-GRÜNBERG (4) P. 201.
2N	Pauschiána	Near Rio Branco	—	—	—	+	Arawak?	KOCH-GRÜNBERG (4) T. 1. P. 14.
3N	Uaisuma	Rio Yapurá	—	—	—	+	Carib	PATER SCHMIDT P. 1069.
4N	Yauaperi	Near Rio Branco	—	—	—	+	Carib	PATER SCHMIDT P. 1069.
5N	Indians	Rio Mapuera	—	—	—	+		O. COUDREAU P. 89.
6N	Indians	Near Cartagena	+	—	—	—		SIMON (2) T. 4. P. 26.
3P	Xarayes	Lago Xarayes	+	—	—	—		NUÑEZ CABEZA DE VACA T. 1. P. 300.
7P	Oyampi	French Guiana	+	—	—	—	Tupi	CREVAUX. P. 213.
[illegible]	Mura	Rio Madeira	—	—	—	+		PATER SCHMIDT P. 1068.
[illegible]	Maxacari	Eastern Brazil	—	—	—	[illegible]		„ „
[illegible]	Mapityan	Southern Guiana	—	—	—	[illegible]	Carib	„ P. 1069.
[illegible]	Wo..ño	Upper Amazonas	—	—	—	+		„ P. 1068

S:Nordenskiöld E-5,4 (1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8

[p.21]

South American Indians 53

C
Ce
283
*352
*71
5
102
352

5s P. monteira and

	Kariri	Eastern Brazil		—	—	?		Pater Schmidt P. 1060.
78	Arawaks	Coast of Guiana	—	—	?	?	Arawak	» P. 1068. Roth (3) P. 35. Grillet et Bechamel P. 172.¹)
V3	Caripou	Yapoco, Guiana	—	—	—	?		Mocquet P. 81.
V8	Peba	Upper Amazonas	—	—	—			Pater Schmidt P. 1068.
IV	Guaná (Arawak)	Rio Paraguay	—	—	—		Arawak	» P. 1069.
6V	Guaná	El Gran Chaco	+	—	—	—		Cominges P. 236.
XI	Yamamadi	Rio Purus	—	—	—	?	Arawak	Roth Hassler P. 14. Also of bark. Pater Schmidt P. 1070.
X4	Payaguá	Rio Paraguay	—	—	—	?		Pater Schmidt P. 1069.
8X	Warrau	Delta of Orinoco	?	—	—	G. M. 12. 1. 300		Plassard P. 391.
X	Yuruna	Rio Xingú	+	—	—	—	Tupi	Pater Schmidt P. 1069.
47	Porokoto		+	—	—	—	Carib	» »
28	Asurinikin	Upper Xingú	+	—	—	—		» »
18	Incas	Peru	?	—	—	—		Pizarro P. 379³) Xerez P. 89.⁴)
100	Arebato	Rio Caura	+	—	—	—	Arawak	Pater Schmidt P. 1069.
101	Camacan-Mongoya	Coast o' Brazil	+	—	—	—		» »
Not on the map	Cháma²)	Bolivia	G. M. 13. 1. 1367	—	—	—		
»	Uaimiri		—	—	—	+		
102	Guayupe	Llanos de Venezuela	+	—	—	+		Pater Schmidt P. 1069.
103	Indians, Ancerma	Colombia	—	—	—	—		Aguado (1) T. 1. P. 791. Cieza de Leon (1) P. 64. To carry the chiefs.
Not on the map	Yaro (Chana)	Rio Uruguay	—	—	—	—		Sepp P. 31.
8N	Zaparo	Ecuador	—	—	—	+		Castrucci P. 34. Karsten.

---

[1] »Les Aroüagues les Aracites, et la pluspart des autres Nations, qui sont vers la riviere d'Orenoque font leurs lits de fil de Pite.» See also H. ten Kate P. 106.

[2] Among these Indians I found only one small hammock that they have got from some other tribe. The Cháma sleep on the floor with blankets of bark-cloth.

[3] Pedro Pizarro says speaking of the principal woman: »Traianlas en hombros, unas en andas, otras en hamacas. Hamacas son unas mantas atadas en unas cañas muy gruesas de grosor de un brazo y mas, por muy buen arte puestas, y allí iban echadas las señoras con cobertores encima.»

[4] »Traíanle muchos indios sobre los hombros en alto y tras desta venian otras dos literas y dos hamacas.»

[5] Also many other tribes in Mainas had hammocks of palmfibres. Chantre y Herrera P. 67.

C
Ce
353
415

I have not seen wooden boxes anywhere else, and scarcely think they are genuinely Indian. I shall return to the subject of baskets.

C
Ce
415
237
ε 171

Except among the Chiriguano and the Chané, I have only seen the scales of the armadillo used as boxes among the Mataco, and there only as a curiosity. They are, however, known from the Guayaqui[1]), from the Indians of Roraima[2]) and from Indians in N. W. Brazil[3]). The sewn baskets of armadillo scales which are sold in the curiosity-shops of Buenos Aires probably hail from Paraguay, and it is not impossible that here, too, we have to do with an original Indian idea.

Ce
237
278
415

The fat of various animals which is used for healing is usually kept by the Chiriguano and Chané in shells, especially those of the *Borus oblongus*.

I shall return to the subject of calabashes.

C
352

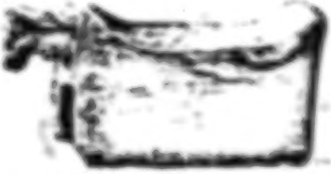


Fig. 3. Seat of wood from the Chiriguano. G. M. 13. 1. 178. 1/10

C
412

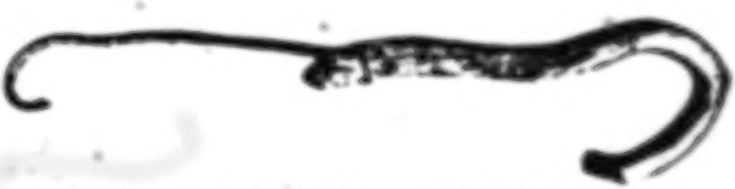
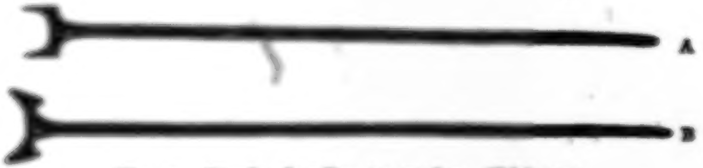


Fig. 4. Wooden hook. Chiriguano. R. M. S. 600. 1/5

---

[1]) Krause fig. 15.
[2]) G. M.
[3]) Koch-Grünberg (2).



C
412

Fig. 5. Wooden handles to spades. Chiriguano.
1/10. A — Private collection. B — G. M. E. 680.

III.

Tillage and tillage implements.

C
CE
241
262

Vegetable food is of great importance to the majority of Indians. This is most specially so with the Chiriguano and Chané. To the former, as well as to those of the latter tribe who dwell on the Rio Itiyuro, maize is of extraordinary importance. The Chiriguano and Chané belong to Wissler's »maize-area» or »area of intensive agriculture». Wissler divides S. America into three great food areas: area of intensive agriculture, manioc area, and guanaco area. Another division would be more correct, viz. —

C
CE
[243]

S
22

1) Area of intensive agriculture.
2) Area of manioc and fishing.
3) Area of wild seeds and fishing. El Gran Chaco.
4) Guanaco area.

There will, of course, be in addition a number of small areas with special conditions of life, as in the extreme south of S. America.

C
241

The Chiriguano grow 11 kinds of maize[1]), 11 varieties of beans[2]), 12 kinds of calabashes[3]), of which 5 are edible, sweet potatoes, mandioca, sugar-cane, mani, urucu, tobacco,

---

[1]) According to Nino Pg. 242 . . . .

C 241 water-melons, melons, figs, tuna[1]), oranges, cotton, millet, and reeds for arrow-shafts.

c ce 241 [245] Bananas are not cultivated. Among the Chané at the Rio Parapiti the sweet-potato is the most important cultivated plant. Of the plants mentioned, the sugar-cane, the melon, the watermelon, the fig, the orange and the millet are not American. c ce [244] All those cultivated plants which have been introduced by Europeans are of slight importance to the Indians. c ce [177] I have never seen mandioca cultivated, but I have heard that it is to be met with in the fields of these Indians. [262] As a staple food of the people it is of no importance here.

c ce 412 177 Iron spades bought from the Whites are the tools employed nowadays. Very occasionally one still sees wooden spades. In Part I I have published a map of the geographical distribution of the spade.

The spade in S. America is evidently a western element of culture, i. e. the idea of fitting on a more or less broad blade to the lower part of the digging-stick is plainly derived from the western area of civilization.

Whence the Chiriguano got the idea of the shapely handles I do not know. They are too shapely for the art to have been derived from the Whites. They have obviously a long evolution behind them, and it is very probable that they had their origin in the Mountain area of civilization.

Hoes with iron blades occur. The Indians have got them from the Whites. I have not seen any primitive hoes, although we are here on the border of the area of distribution of the genuine American hoe[2]).

The Chiriguano and Chané use a small implement for removing the corn from the corn-cobs which I have described in Part I. P. 32.

---

[1]) Opuntia.

c ce [114] [2]) It is incorrect to affirm, as Wissler does, (P. 17) that the hoe was unknown in S. America. Incas had hoes and they are found still among the Quichua.

IV.

Hunting Equipment.

C
CE
411
[224]

The Chiriguano and the Chané are not keen huntsmen. They are rarely seen out hunting. Their hunting-weapons are the bow and arrow, the pellet-bow, clubs, slings, and snares, all of their own manufacture. The Chiriguano have bird-nets too, and formerly they had the bola as well. The Chiriguano and the Chané have no weapons exclusively used in warfare. Formerly they had lances¹).

C
[223]

C
CE
411

The bow and arrow are going quite out of use among these Indians except for fishing and as a weapon for boys. The degenerate type of bow now seen among the Chané and Chiriguano is certainly not original. According to LIZARRAGA²) the Chiriguano used to have bows of a man's height. It is of great interest to learn from LIZÁRRAGA that the Chiriguano used to protect their left wrist with a small piece of wood to prevent the skin being grazed by the bow-string. Something similar occurs among the Ashluslay (see Part I. P. 42).

C
[774]

C
CE
411
[137]
[224]
[171]

Their arrows are very like those used by the Choroti and Ashluslay. The arrow shafts are of the same kind of reed³). At the Rio Parapiti this plant, which grows abundantly beside the Rio Pilcomayo is cultivated by the Indians. On the Rio Parapiti there is a place called Ouivarenda, which means «where there is chuchio.» This plant, the *Gynerium* sp. whose seed-stalks so many Indian tribes use

---

¹) CORRADO P. 331.

²) P. 528.* «Andan desnudos y quando mucho qual ó qual tiene una camisetilla hasta el ombligo; . . . son grandes flecheros; sus armas son arco y flecha; el arco tan grande como el mismo que lo tira, y porque la cuerda no lastime la mano izquierda, en la muñeca encajan un trocillo de madera y allí da la cuerda.»

³) *Arundo donax.*

*[Errata: this should read "See Sotomayor y Saa. P. 228." (4 errata sheet, Cat. 116, P.285 -- Analyst.]

C
ce
411
[224]

for arrow shafts has been completely destroyed by cattle along the Rio Parapiti. Formerly the Chané made the shafts for their arrows of »chuchio».

C
[224
226]

The arrow points are made of hard wood and sometimes of iron. Arrows with several tips are used for fishing and sometimes also for shooting birds. Arrow-tips made of cactus spikes are used by some Chiriguano for fishing. Some characteristic types of arrows are depicted here (fig. 6). Some arrows are feathered to guide the flight. The feathers are fixed in the way that MAYER calls »Peruvian cemented feathering». The feathers are quite small as on Chaco arrows generally. Arrows with thickened heads (bird arrows) are very common. Some of them have the shape we see depicted here (fig. 6 E). This type does not occur among any of the other tribes I got to know during my travels, but they are common among several peoples living in the east, e. g. the Caingua, Guató, and Bororó, and in the northern part of S. America, among the Trio, Guahibo and others. They have most likely been introduced here by the Chiriguano. It is not probable that they have come from the Arawaks for, as a rule, they do not use blunt bird-arrows. In Part I I have published a map (No. 3) showing the distribution of the bird-arrow in S. America. Later on I will deal with arrows particularly used for fishing. The Chiriguano and Chané sometimes use a special kind of bast to bind round the arrow where the point is inserted in the shaft. The same kind of bast is not met with among the Choroti and Ashluslay or among the other Chaco tribes I have got to know. It occurs, however, among the Caingua.

C
Ce
[171]

C
[171]

C
ce
[283
171]

In part I I have already published a map showing the distribution of the sling in S. America. I have nothing to add to this which cannot be seen in the subjoined drawings (fig. 7).

The pellet-bow is rather common among the Chiriguano and also among the Chané. It is chiefly used by boys and youths. I wish here to make a few additions to what I have said about the pellet-bow in Part I.

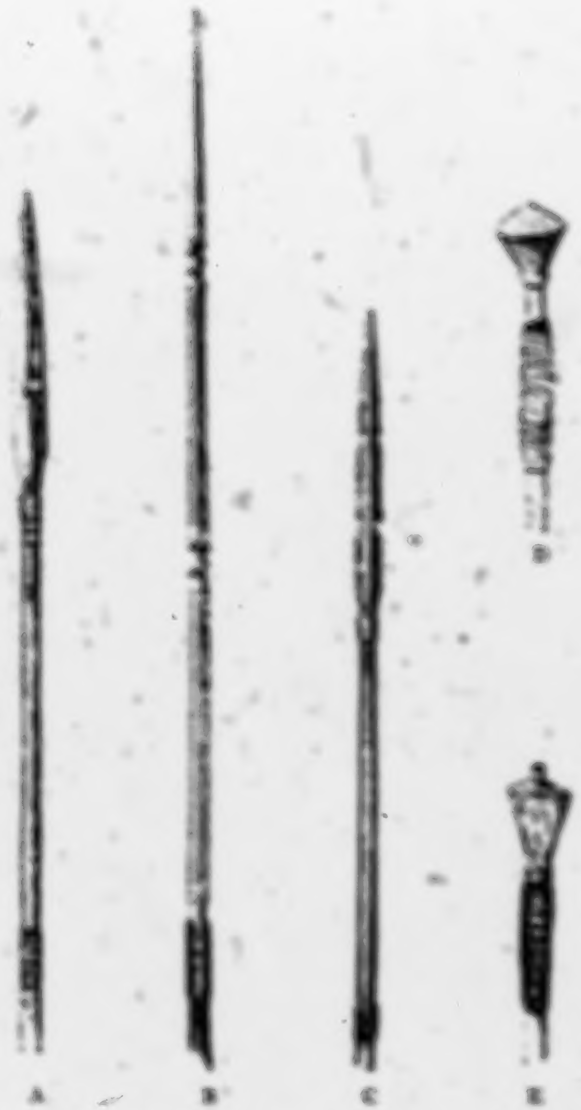


Fig. 6. Types of arrows from the Chiriguano and Chané. Shafts of reed, points of wood. ⅓.

A = Chané. Rio Itiyuro. R. M. E. 61. B = Chiriguano. R. M. E. 633.
C = Chané. Rio Itiyuro. R. M. E. 58. D = Chiriguano. R. M. E. 620.
E = Chiriguano. R. M. E. 610.

C
CC
411
179
177
171

In a weighty article E. von Rosen (3) has criticised my opinion that the pellet-bow was possibly brought from India to S. America by Portuguese sailors in post-Columbian times. He is quite correct in the statement that the thick part in the middle of the bow is not for strengthening but is merely for better grip. This holds concerning both the Asiatic pellet-bows and some of the American. This contrivance is practical but not indispensable. It is certainly not little toy-bows alone that have not got it. It is quite wanting on the pellet-bows of the Choroti, Ashluslay, Tapiete, Mataco and Yuracare. Presuming that the pellet-bow in S. America is of Asiatic origin, it is evident that the Indians who first learnt the use of the pellet-bow

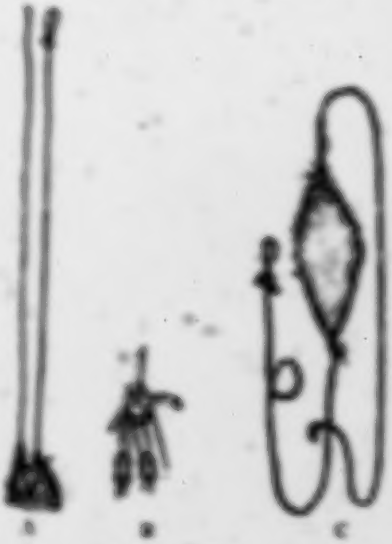


Fig. 3. Slings.

A Chané, Rio Parapiti $^{1}/_{12}$. R. M. F. 073.
B Detail of A. $^{1}/_{3}$
C Chiriguano. $^{1}/_{6}$. R. M. E. coll.

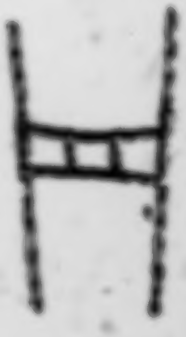


Fig. 4. Detail of pellet-bow. Seat for the pellet.

Chiriguano.

R. M. E. 300 $^{1}/_{4}$

C
Ce
411
177
171*
114

from the Portuguese have kept its Asiatic shape, while the tribes that received it later have made pellet-bows more like their usual bows.

Von Rosen puts forward the supposition that the S. American pellet-bow may be an imitation of the European crossbow. This is supported by the fact that the pellet-rests on some S. American pellet-bows (fig. 8) and the pellet-rests on some European crossbows are very similar. This similarity is extremely noteworthy. Still, I deem it unlikely that Indians should have hit on the use of pellet-bows because they had seen Portuguese crossbows — especially as I am not aware that the Portuguese in S. America used bullets for their crossbows. In any case the pellet-bow in S. America would be a post-Columbian culture-element.

C
[192]

It is quite true that some Indians, e. g. the Choroti and Ashluslay have their own words for pellet-bow. But it is a common thing for some Indian tribes to have coined words to denote objects introduced by Europeans. On the other hand, it never happens that the Indians that still speak their own language lack native words for objects which are plainly pre-Columbian with them. It is therefore of primary importance for the settlement of the question as to whether the pellet-bow was introduced in post-Columbian times to note the fact that several tribes lack native words for the pellet-bow, calling it »bodoque«.[1])

C
Ce
177
411
171*

The Chané call it »boroque«. I am not acquainted with any Chiriguano name for it. A circumstance that speaks in favour of the pellet-bow being a post-Columbian culture-element is the fact that these bows are unknown in Peru, in Central America, and in Mexico, that is to say, in the cultural zones proper. There are not many of the elaborate culture-elements in S. America that have been unknown to

---

[1]) From the Portuguese.

C ce 411 177 *171

the most civilized tribes and only known to the tribes east of the Andes. This applies especially to those cultural elements that are of little or no importance in the struggle for existence. The pellet-bow is the only weapon of any importance which, as far as is known, was unknown in all the seats of higher civilization in America. If the pellet-bow is an original American invention, it must have been invented by a comparatively uncivilized tribe.

C ce 411 *171

The pellet-bow is nowhere in S. America of any great importance as a hunting weapon. The heavy hand of necessity has never spurred the Indians into making an invention of this kind.

C ce 411 *171 114

Friederici has pointed out to me in a letter that in Martyr »De orbe novo» there is a statement about bows from the coast of Venezuela used by boys for shooting with pellets of clay or wax. This is plainly the same statement as Gomara's that I quoted in Part I. Martyr's statement is in the Eighth Decade, where he complains, that his memory was beginning to fail him. I believe there must be some misapprehension on Martyr's part, and that the pellets in question were arrows with thickened heads of wax or wood. Martyr cannot refer to pellets thrown by hand, as he plainly speaks of bows. It is not likely that wax pellets were used for clay pellet-bows, but, on the other hand, it is not at all unusual that arrows used in play should have thickened wax heads. Arrows of this kind have been brought from the Ijca in Colombia by Bolinder. The pellet-bow is mentioned neither by missionaries nor by any modern authors as occurring in Venezuela or any other part of northern S. America. It is extremely unlikely that this desirable toy weapon should have existed there at the beginning of the 15th century and then entirely vanished. Such an isolated occurrence would be most peculiar and unusual.

C ce 411 *[171]

The clubs (fig.9) that I have seen among the Chiriguano and Chané have not always clearly defined heads like those of the Choroti and Ashluslay.

of the Choroti and Ashluslay. As far as I know they are only used for hunting peccary. These animals are brought to bay by dogs and killed with clubs. I do not venture to say where this most primitive kind of club originated.

Ce
441
[224]

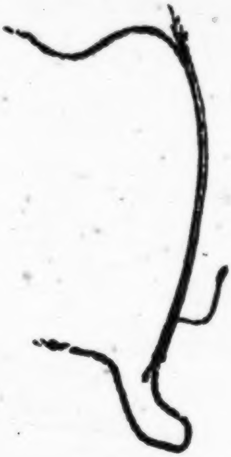


Fig. 11.

C
Ce
441
223
224

Fig. 9.

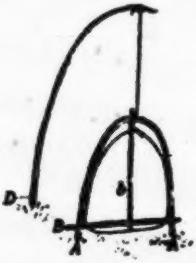


Fig. 12.

Fig. 10.

Fig. 9. Club of hard wood. Chiriguano. R. M. E. 580. $^1/_8$.
» 10. Parrot-snare. Chané, Rio Parapiti. R. M. P. $^1/_{11}$.
» 11. Parrot-snare made of a piece of twine and a feather. The specimen depicted is from the Tapiete. R. M. I. 267. $^1/_2$.
» 12. Snare. Chané, Rio Itiyuro.

Ce
[287]

C ce At least three kinds of bird snares are used. One is a 223 snare fixed onto a long rod (fig. 10).

It is used in the following way: A tame parrot is tied to a thick bush in which the hunter is concealed. When the wild parrots, which have been decoyed by the confined parrot, settle in the bush, they are snared by the Indian hidden C there. I have seen similar rod-snares among the Chané and ce the Tapiete. According to GUMILLA[1]) snares of this kind * [171] were used for quail-hunting on the Llanos de Casanàre, in Chire and Tocaria, at Neyva and Vaguè and at the Rio Tercero between Buenos Aires and Tucumau.

C According to (GUMILLA, HERRERA[2]) speaks of these snares ce being used in hunting parrots in Cuba. According to 223 * 171 MARTIUS[3]) Indian boys in Brazil used these snares. Unfortunately he does not mention in what tribe or tribes he saw them. De PAULA SOUZA[4]) speaks of the same kind of snare from the Caingang, VASCONCELLOS[5]) from Indians on the Brazilian coast, and AMBROSETTI from the Cainguá[6]).

Another bird snare found among the Chané is the one depicted here (fig. 12). Snares constructed on the same or a similar principle I have seen among the Choroti. KOCH-GRÜNBERG[7]) depicts similar snares, in use among the Indians by the Rio Caiarý in northwestern Brazil, and AMBROSETTI from the Cainguá[8]). It is certain that similar snares are found among many other Indians, though they have not been studied particularly. As I have already mentioned in the first part of this book I will in time describe what I have collected in the way of snares and traps during

---

[1]) T. 2, P. 299.

[2]) Decada I, lib. 9, cap. 4.

[3]) (1) P. 669.

[4]) P. 744.

[5]) P. LXXVIIII.

[6]) (7) P. 728.

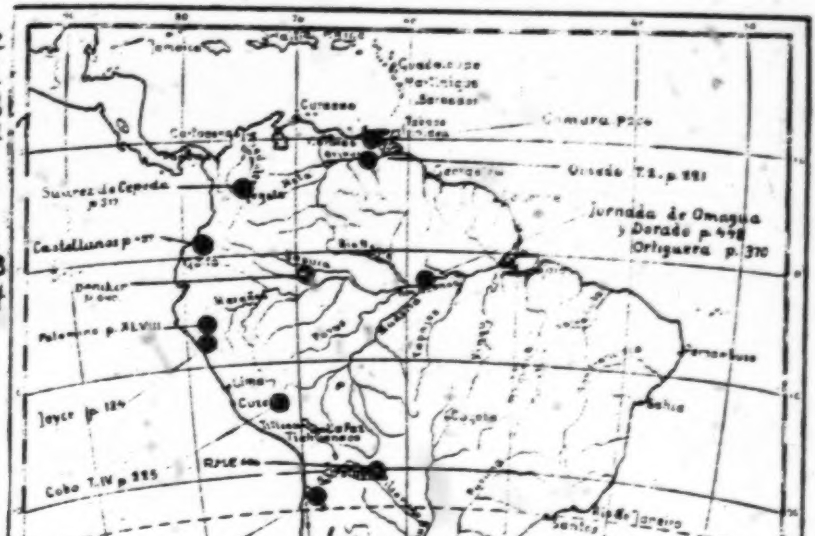
[7]) (2) Vol. I, p. 227.

[8]) (7) P. 730.

5:Nordenskiöld E-5,4 (1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8

South American Indians S3

C
Ce
102
2231
224-1
*171
S
102
223
224


Jamaica
Guadeloupe
Martinique
Barbados
Curaçao
Cartagena
Trinidad
Gumilla p. 250
Oviedo T. 2, p. 221
Suarez de Cepeda p. 317
Bogota
Jornada de Omagua y Dorado p. 498
Orliguera p. 370
Castellanos p. 37
Quito
Dorsker
Marañon
Palomino p. XLVIII
Lima
Cuzco
Joyce p. 124
Cuyaba
Titicaca
La Paz
Tiahuanaco
RMLE
Cobo T. IV p. 225
Pernambuco
Bahia
Rio de Janeiro
Santos
Tucuman
Uhle (8) p. 103
Santiago
Buenos Aires
Cooper p. 190
110
100
90
80
70
60
50
40
30
20
10
0

Map 4. The distribution of the hunting net.

C
ce
223
*171

my travels. Though rather an extensive collection, it is quite insufficient for comparative researches.

C
ce
223
224
*171
114

The bird-nets used for hunting, occasionally found among (4) the Chiriguano, are of great interest (fig. 13 and map 4). I have not seen hunting nets elsewhere. Bird-nets are mentioned by several writers from the Alakaluf. These Indians and the Chonos were also acquainted with seal-nets. The statements in literature about these nets are to be found in COOPER'S[1]) excellent work. CREVAUX speaks of hunting nets from (4S) the Mirańa[2]). UHLE[3]) mentions finds of the kind in Atacama. JOYCE[4]) speaks of nets that were used for hunting deer and birds on the coast of Peru. He depicts a very interesting earthenware vessel found at Trujillo representing a deer-hunt in which the huntsmen used the throwing stick and the hunting net. COBO[5]) speaks of bird-nets from the Inca. PALOMINO[6]) mentions nets used for deer-hunting from Chuquimayo in northern Peru. Hunting-nets are also mentioned by ORTIGUERA[7]) and by the author of Jornada de Omagua y Dorado[8]) from the Aruaquinos on the Amazon. From what OVIEDO Y VALDES[9]) says, the Indians also used hunting nets on the Rio Orinoco. GOMARA[10]) mentions nets from Cumaná in which ant-eaters were caught.

---

[1]) P. 190.

[2]) After DENIKER (2) P. 640. »Quoique vivant sur les bords de rivières poissoneuses, ils ne pêchent point et se bornent á chasser comme les anciens Quichua á l'aide de filets tendus entre les arbres, dans lesquels ils poussent, á force de cris et de gestes, les bêtes effarouchées.»

[3]) (5) P. 10[illegible].

[4]) (1) P. 124.

[5]) T. 4, P. 225.

[6]) P. XLVIII.

[7]) P. 370.

[8]) P. 448.

[9]) T. 2, P. 221. »Toman codorniçes y conexos y tórtolas en mucha cantidad con laços y redes: assi tambien zorras y raposos, como muchos puercos salvajes de los que llaman *vaquiras*.»

[10]) P. 206.

C
ce
223
224
171*
114

SUAREZ DE CEPEDA[1]) in his most interesting treatise on the Colima-Indians in Columbia, tells us that they tried to catch comets, which they imagined to be birds, with nets which they placed in their fields. This seems to prove that these Indians knew the use of bird nets. CASTELLANOS[2]) states that the Indians in the valley of the Patia (in southern Columbia) tried to catch the Spaniards' horses with nets. Most all of these authors who speak of the hunting net belong to the sixteenth century. This should give those who are doing work like mine some food for reflection. It proves how perfectly indispensable this old literature is as a means of learning the ethnology of the S. American Indians. *How imperfect a map of this kind would have been without the old literature!* One may ask why hunting nets are so scarce now. This is apparently owing to the fact that in most places where hunting nets have been in use the Indians have lost their original civilization. The above authors not having given us a detailed description of the nets, we do not know if they resemble those used by the Chiriguano. We are not even always told what was caught in these hunting nets.

C
223

The deer-nets used on the Peruvian coast were of course considerably larger than the nets used here. Their shape also was quite different. The Chiriguano nets are clap-nets and are used in the following way. The net is spread on the ground at a spot where there are plenty of pigeons. The pigeons are decoyed with maize to settle between the two halves of the net. A string runs from the net to a fowler

---

[1]) P. 517. »Los rrayos que se estienden y esparcen de la cola ó cabeça de la cometa dizen que son plumas y pelos del paxaro que yendo bolando las vá despidiendo para fin de las cosas que viene á acabar: y para mitigar y rregalar la yra de la furia atajando por algun buen medio . . . . y en sus labranças arman unas rredes de hilo muy de proposito estas dizen que son para enrredar y caçar en ellas la pobre cometa.«

[2]) P. 457.

C
223 hidden behind a bush or the like. With a pull of the string the man makes the net fall upon the maize-eating pigeons.

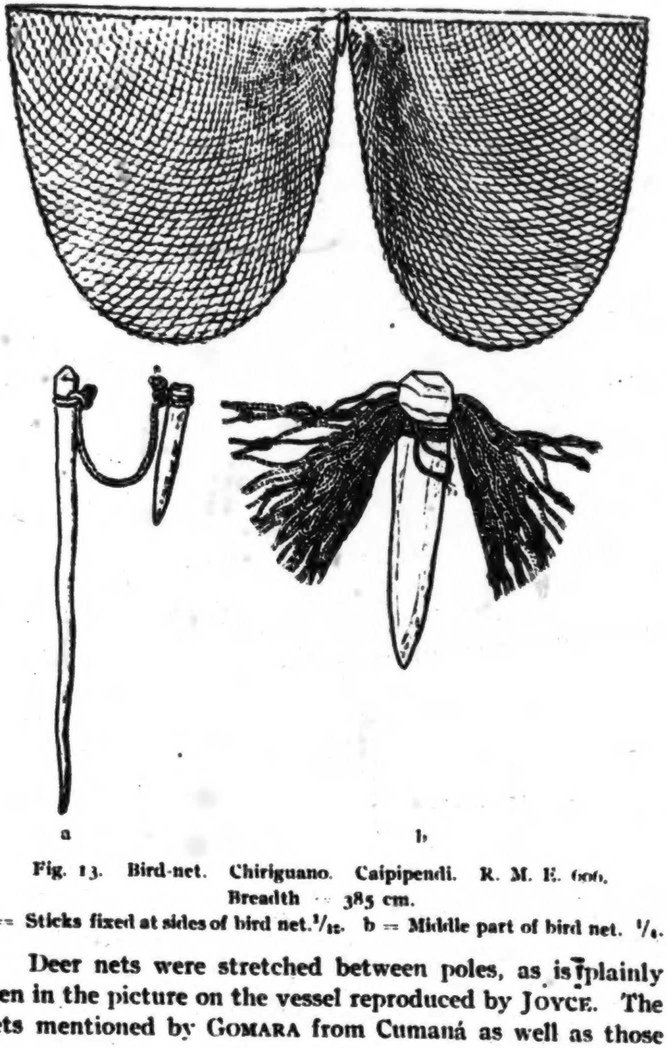


Fig. 13. Bird-net. Chiriguano. Caipipendi. R. M. E. 606. Breadth = 385 cm.
a = Sticks fixed at sides of bird net. $^1/_{12}$. b = Middle part of bird net. $^1/_4$.

C
ce
~~223~~
224
*171 Deer nets were stretched between poles, as is plainly seen in the picture on the vessel reproduced by JOYCE. The nets mentioned by GOMARA from Cumaná as well as those

used by the Colima Indians to catch the »Comet-bird» were obviously also fixed nets.

Ee
223
224
171 *

We cannot prove that the different kinds of hunting-nets are of the same origin. Judging by the general distribution of the hunting-net in S. America, it is, however, likely that the Chiriguano learnt their use from the western culture zone. As has already been mentioned, COBO says that bird-nets occurred among the Inca.

V.

Fishing tackle.

C
ce
226

Three methods of fishing are known to the Chiriguano and Chané with, moreover, a northerly distribution. These methods are the use of the fish-spear or fishgig, the use of many pointed arrows, and fishing with poison.

C
ce
*171
114
226
411

I have not seen the fishspear among the Chiriguano. ERIC VON ROSEN[1]), however, depicts one from this tribe which is preserved in the Riksmuseum in Stockholm. Something like it from these Indians is mentioned by ACOSTA[2]).

The Guarayú[3]) spear eels with two single-pointed spears of »chonta«. According to EDER[4]) the Mojo used fish-spears with three points. They did their spearing by torchlight and fixed the torches in the prow of their canoes. According to FREIREISS[5]) the Coroados had double-pointed fish-spears. KOCH-GRÜNBERG[6]) mentions triple-pointed fishgigs from the Huhúteni and other Indians in northwestern Brazil. The Indians in the northwest of Brazil also fish by torchlight. The Indians at Lago Titicaca[7]) use triple-point-

C
ce
226
*171
411

---

[1]) (1) Pl. XIV.

[2]) T. I, P. 236 »Otro género de pesca vi, á que me llevó el Virey Don Francisco de Toledo; verdad es, que no era en mar, sino en un rio, que llaman el Rio Grande, en la Provincia de los Charcas, donde unos Chiriguanas se zabullian debajo del agua, y nadando con admirable presteza seguian los peces, y con unas fiscas, ó harpones que llevaban en la mano derecha, nadando solo con la izquierda herian el pescado, y así atrevesado lo sacaban arriba, que cierto parecian ellos ser mas peces, que hombres de la tierra.«

[3]) NORDENSKIÖLD (9) P. 177.

[4]) P. 301.

[5]) P. 271.

[6]) (2) T. 2, P. 34, Fig. 9. See also WHIFFEN P. 113.

[7]) NEVEU-LEMAIRE P. 75.

C
Ce ed poles *that are used both as fish spears and to punt their*
226 *rafts along.*

411 It is not unlikely at all that it is the multi-pointed pole
*471 which has suggested the fish spear. These poles are multi-
pointed in order that they may be used in swamps, to punt
their canoes along. It was natural that the Indians should
try with these poles to have a thrust at any fish they might
see. Then, if they migrated to a district where many-point-
ed poles were no longer needed, these poles lived on as
fishspears.

C As I have already mentioned the Chiriguano shoot fish
226 with a bow and arrow. For this purpose they sometimes,
411 though not always, use many-pointed arrows. I have seen
two different types which are depicted here (fig. 15). One
has two wooden points, the other which was used at Rio
Parapiti for shooting small fish, has many points of cactus
spikes. Two or three-pointed arrows used for shooting fish
are spread in South America chiefly in the water region of
the Amazon, as indicated on map 5 and table 4.

Ce I have not visited any Chané who live where they are
226 able to use this method of fishing. Among the arrows in
411 my collection there are no multipointed ones that came from
them.

As seen from map 5 and table 4, the many-pointed fish-arrow seems to be a cultural element that came to the Chiriguano from the north part of S. America, most likely from Mojos. I have seen the harpoon arrow neither among the Chiriguano nor the Chané.

Table 4.

C
Ce *The following tribes use multi-pointed fishing-arrows. Map 5.*
102 4. Chiriguano, Fig. 15. Two or many points.
226
411 31. Trio, GOEJE (1) Pl. V. Fig. 9. Three-pointed.
*471 33. Campa, THERESE v. BAYERN (2) Vol. 2, Pl. 1,7
Four-pointed.
S
102
226

C
Ce 41. Pauserna, Two-pointed.
102 43. Huanyam, Three-pointed.
226 47 a. Patamona, THULIN G. M. Three-pointed.
411 48. Indians Northwestern Brazil, KOCH-GRÜNBERG (2) T. 2. P. 230. Two-pointed.
471
5 Not on the map Schakaja—Rio Orinoco. RATZEL Vol. I. Pl. 24. Three-pointed.
102
226 55. Indians, coast of Guiana. STEDMAN T. 2, P. 166; BARRERE P. 169; QUANDT. Fig. 6. Three to five pointed.
63. Yamiaca, Four-pointed. For bird-shooting. Probably also used for fishing.
64. Huari, Two or three-pointed. Nambicuara, ROQUETTE-PINTO (2) P. 184. Two, three and four-pointed.
70. Piro, Upper Rio Purus. KOCH-GRÜNBERG, Communicated by letter.
V3. Caripou, MOCQUET Fig. CC. Three-pointed.
6X. Tambopata-Guarayo. Three-pointed.
2M. Wapisiana. FARABEE Fig. 13. Three-pointed.

C
Ce
226
I have not seen these Indians fish with poison. At the Upper Rio Pilcomayo, however, I heard in 1913 that the Chiriguano know how to poison the water with a certain kind of bark as a means of catching fish. A great number of plants are used by S. American Indians for this purpose, particularly in the basin of the Amazon.[1] On the map and table, I have endeavoured in some measure to elucidate the distribution of this fishing-method. Curiously enough KARL V. D. STEINEN did not see this method of fishing among the Indians tribes at the upper Rio Xingú.[2] I have neither seen it myself nor heard of it among the Indians in El Gran Chaco. Nor does MAX SCHMIDT mention fishing with poison from the Guató.

---

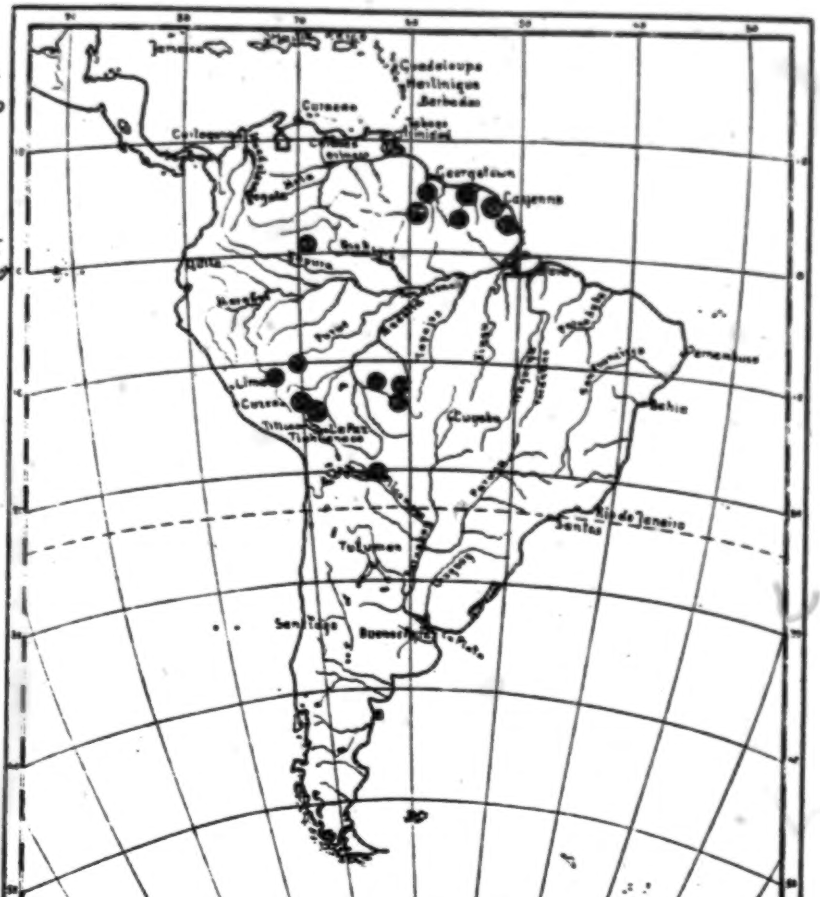
[1] See further KOCH-GRÜNBERG (2) T. 2.

[2] (3) P. 235.

5:Nordenskiöld E-5,4 (1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8

South American Indians 53

C
Ce
102
226
4/1
*17!
S
102
226



Jamaica
Guadeloupe
Martinique
Barbados
Tobago
Trinidad
Curacao
Cartagena
Caracas
Bogota
Georgetown
Cayenne
Quito
Lima
Cuzco
Titicaca
La Paz
Cuyaba
Pernambuco
Bahia
Rio de Janeiro
Santos
Tucuman
Santiago
Buenos Aires
La Plata

Map. 5. The distribution of the multi-pointed fishing arrow.

Table 5.

Fishing with poison. Map 6.

C
ce
226 4. Chiriguano.
*171 10. Araucanians, Molina P. 188; Guevara (1) P. 90.
102 13. Karajá, Krause P. 250.
S 15. Kayapó, Krause P. 386.
102 18. Quichua, Cobo T. 4. P. 227.
226 21. Cainguá, Ambrosetti (7) P. 728.
23. Churápa.
24. Chimáne.
25. Mojo, Eder P. 303—304.
30. Guyaqui, Ambrosetti (7) P. 728.
31. Roukouyennes, Crevaux. P. 287, 289.
33. Campa, Grandidier P. 142.
34. Jivaro, Rivet (1) P. 57.
37. Motilon, Bolinder (2) P. 36.
38. Tupi, Vasconcellos P. LXXVIII.
40. Guarayú, In the missions.
45. Botocud-Indians, Wied P. 31.
47. Patamona, Thulin; Wapisiana, Farabee P. 59.
48. Indians northwestern Brazil, Koch-Grünberg (2) T. 2. P. 48. with literature.
49. Araona, Armentia (2) P. 141.
51. Siriono, Herzog P. 79.
55. Indians Coast of Guiana, Biet P. 358; Stedman T. 2. P. 119.
58. Cavina, Tumupasa, cultivate plants for their poison.
61. Indians Rio Yapurá and Rio Iça, Whiffen P. 113.
62. Chacobo.
74. Tamanaco, Gilij. P. 325.
77. Tapirapé, Krause P. 407.
79. Guinau and Yekuaná, Phot. Koch-Grünberg.
90. Chipaya and Curuahé, Snethlage P. 77.
94. Chiquitos, Fernandez P. 46.
99. Cumanagoto. Caulin, P. 90.

6 P. Aguaruna, Quintanilla P. 79; Habich P. 172. C Ce
IX. Colorado, Rivet (3) P. 57. 226
IC. Paez, Uricoechea (2) P. 77. 171*
7 F. Half civilized Indians, Lower Tapajos, Bates P. 200. 102
4 L. Caxinauá, Abreu P. 36. 5
7 S. Arawaks, Im Thurn P. 234. 102
8 S. Indians Orinoco, Gumilla T. 1, P. 322. 226
9 S. Maynas, Chantre y Herrera P. 106; Saabedra P. CXLVII.
1 T. Leco, Weddel P. 448.
2 T. Indians at Schapaja, near Moyobamba, Herndon P. 165.
3 T. Acoqua, Oyapoc, Guiana, Fauque P. 318.
4 T. Indians Rio Ucayali, Castelnau Vol. 4. P. 446—447.
X 7. Indians Rio Amazonas, Acuña P. 71.
I Indians Paraguay, Dobrizhoffer T. 1, P. 344.
104. » Rio Casanare, Rivero P. 8¹).
105. » Rio Negro, Ribeiro de Sampayo. P. 21¹).

C Ce 226 The Chiriguano and the Chané fish with dip-nets both in the Rio Parapiti and in the Rio Pilcomayo. Those used in the Rio Parapiti are small and the meshes fine, as only small fish occur there. They seem to be dwarfed specimens of the big nets used in the Rio Pilcomayo. I know too little about the distribution of different types of nets in S. America to try to show their geographical distribution. Dip-nets like those used by the Chiriguano and Chané I have only seen among the Choroti, Ashluslay, Mataco, Toba and Tapiete. C Ce [171]*

C 226 On the Upper Rio Pilcomayo the Chiriguano build great dams of stone in which they catch fish when the fish are making their way up the river. Such damming contrivances are also mentioned by Cornejo²) from the Chiriguano

---

¹) After Friederici. Communicated by letters.

²). P. 66.

C 226 who dwelt on the Upper Rio Bermejo beyond Centa. The Figure 14 shows us the construction of one of these dams. Nino[5]) speaks of a large kind of trap, the »pari», used by the Chiriguanos. I have not come across any of them in my travels. The Caingang[6]) call big traps »pari», as do also the Apiacá[7]).

CE 226 I have seen the Chané at Rio Itiyuro fishing with calabashes and also employing the method of making dams.[8]) Fishing with calabashes proceeds as follows: A number of leafy boughs are stuck into the bottom of the stream to form a shadow and in front of each one of them a calabash containing some ground maize offal from the chicha brewing is placed. The fish enter the calabash, which is emptied now and then by the women. I have not seen this method of fishing in any other place.

C CE 226 [171] The Chiriguano and Chané also fish with hooks which they now get from the Whites. They use neither floats nor sinkers.

C CE 226 171 Among present-day Indians I have seen an original fishhook from the Tambopata-Guarayo. That the fish-hook in S. America is of pre-Columbian origin is known by the numerous finds of fish-hooks on the coast of Peru and Chili made by UHLE and others. Among the Chiriguano the fish-hook is certainly also a pre-Columbian cultural element. This is apparent from the fact that they, as well as the Tupi Indians on the coast of Brazil, call the fish-hook »Pinda», which word is plainly identical with the Quichua or Incan name for fish-hook, »Pinta». From this it appears that the Chiriguano and Chané probably learned the use of fish-hooks from the western region of civilization. C CE [177]

C CE 226 177 It is also known that the first Conquistadores brought fish-hooks for barter, so it is most likely that many Indian

[text continues on p.46]

---

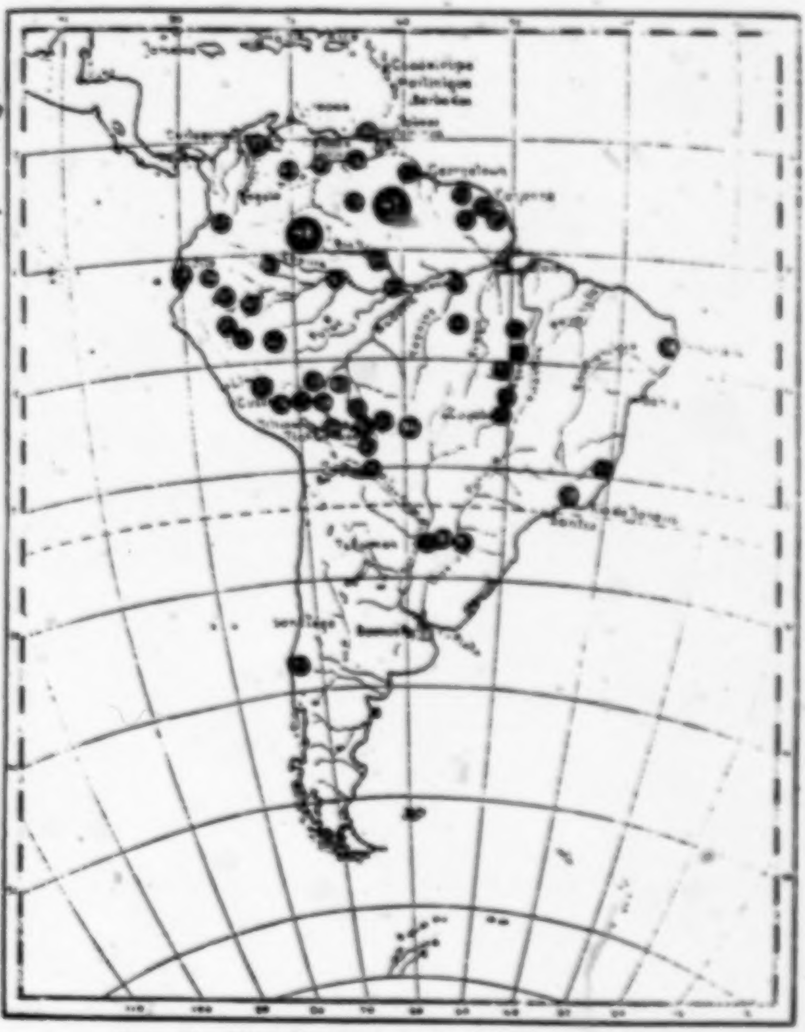
[5]) P. 250.

[6]) AMBROSETTI (2) P. 338.

[7]) FLORENCE P. 276.

[8]) See NORDENSKIÖLD (8 a) P. 171.

C
Ce
102
226
*171
5
102
226


Guadeloupe
Martinique
Barbados
Cayenne

Map. 6. The distribution of fishing with poison.

C

Ce tribes have learnt this method of fishing from the whites.
226 As mentioned above, I consider the fish-hook I found among
197 the Tambopata - Guarayo[7]) to be of original Indian type.
C Something similar is also mentioned by FIGUEROA from the
Ce Mainas[8]). Fish-hooks of bone occur among the Indians at
226 the Rio Napo. The Uitoto use hooks of wood or palm-spikes.[9])
#191 In rivers where the palometas (Serrasalmo) occurs, fishing with hooks of an inferior material is almost impossible, as these voracious fish bite through a hook with their sharp teeth as easily as they would a line.

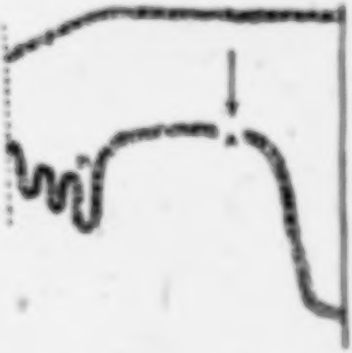


Fig. 15. Dam of stone from the Upper Rio Pilcomayo.
A — Entrance. B — Pocket where the fish are caught.

The Chiriguano on the Rio Pilcomayo use a wooden needle with a line to pull up fish that they have caught. Such needles are also known from the Choroti, Ashluslay, Toba, Mataco and Lengua.

---

[7]) (a) Fig. 15.

[8]) P. 208.

[9]) WHIFFEN P. 112. (See also WALLACE P. 190.)

In the following table I have endeavoured to show the distribution of different methods of fishing that I have seen among the Indian tribes visited by me.

Ee. 226/171

Table 6.

Methods of Fishing.

A
S
[226]

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ashluslay	+	—	+	+	—	—	—	—	+	—	—
Aymara	—	—	—	—	—	—	+	—	—	—	—
Atsahuaca	+	—	—	—	—	—	—	—	—	—	—
Cavina	—	—	—	—	+	—	—	—	—	—	—
Cayubaba	+	—	—	+	—	—	—	—	—	—	—
Chacobo	+	—	—	—	+	—	—	—	—	—	—
Chama	+	—	—	—	—	—	—	—	—	—	—
Chané	—	—	+	—	—	—	—	—	+	—	—
Chimane	+	—	—	—	+	—	—	—	—	—	—
Chiriguano	+	+	+	—	+	—	—	—	+	—	+
Choroti	+	—	+	—	—	—	—	—	+	—	—
Churapa	+	—	—	—	+	—	—	—	—	—	—
Guarayú (Mission)	+	+	+	—	+	—	—	—	—	—	—
» Pauserna	+	—	—	—	—	—	—	—	—	—	+
Huanyam	+	—	—	—	—	—	—	+	+	—	+
Huari	+	—	—	—	—	—	—	—	—	—	+
Mataco	+	—	+	—	—	—	—	—	+	—	—
Siriono	—	—	—	—	+	—	—	—	—	—	—
Tambopata-Guarayo	+	—	—	—	—	+	—	—	—	—	+
Tapiete	+	—	+	—	—	—	—	—	+	—	—
Toba	+	—	+	—	—	—	—	—	+	—	—
Yamiaca	+	—	—	—	—	—	—	—	—	+	+
Yuracare	+	—	+	—	—	—	—	—	—	—	—

The Chiriguano and Chané, with the exception of those who live at the Rio Pilcomayo, give the impression of being fishermen without any water to fish in. When there are

---

[1]) See Part 1. P. 39.

[2]) Of different kinds.

When there are plenty of fish in the Pilcomayo, there is a great trade in dried fish in that part of the country. The Indians tramp long distances in order to fish or get fish by barter.[1] In places where the fish are so small that they rarely exceed the length of a finger, as in Rio Itiyuro, the fishing, done by women and children, still forms no small part of the diet of the people[2]. It is not surprising that the Chiriguano and Chané are eager fishermen, for no doubt both tribes come from well-watered tracts of the country where fish is abundant.

C
347

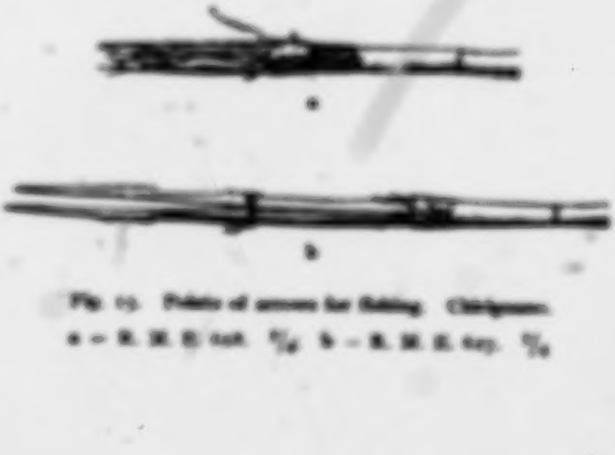


Fig. 13. Points of arrows for fishing. Chiriguano.
a = R. M. E. 648. ½ b = R. M. E. 643. ½

---

[1] Padre Doroteo Giannecchini ms. p. 297: «Del pescado es muy deseoso, mas no todas las tribus lo tienen cerca, éstas, cuando saben que en las orillas de los grandes ríos hay en abundancia, caminan hasta cinco ó seis leguas para hacer el cambalache: llevan maíz ó harina y la cambian por pescado.»

[2] This is where they get their very clean habits and their eagerness to bath every day.

VI.

Domestic Animals.

Apart from the dog, the Chiriguano and Chané keep only European domestic animals. There is now no genuinely Indian breed of dogs here. Cattle-breeding is of some importance in certain parts, especially in the Caipipendi valley. Milking the cows is not understood. Some of these Indians keep large numbers of sheep and the women spin the wool and weave woollen stuffs. It is not known if they had wool in the pre-Columbian period, as it has not been ascertained whether these Indians kept llamas or not. Poultry are of great importance to the Chiriguano and Chané. The Indians in South-America were exceedingly quick to learn the art of poultry-keeping, thus, when Cabot touched the south coast of Brazil in 1526, he got plenty of hens from the Indians by barter.[1] The Chiriguano and Chané have but few horses. They are not nearly such good equestrians as, for instance the Toba. C ce 23 [177]

I have in my collection a riding whip stock made by the Chané. Del Campana depicts a very primitive saddle from the Chiriguano. I have seen similar saddles among the Toba Indians. C ce 492

When these Indians acquired the European domestic animals, the chase must have lost in importance for them. They obtained their meat in another way. The possession of cattle compelled them to enclose their tilled ground, or to have it far removed from the pastures. C ce 177 231] 241]

---

[1] Medina (2) T. 1, P. 438.

VII.

Tools.

C
412
[114]
With the exception of bone awls the Chiriguano Indians of to-day have no genuinely Indian tools. Bone awls which I have already dealt with in part I very rarely occur among the Chiriguano. I omitted to mention this in the German edition of Part I.

VIII.

Fire-making.

C
372
Once only have I seen a Chiriguano Indian making fire by wood friction. He had forgotten his matches. Flint-and-steel are also seldom seen among these Indians now-a-days. In my collection there is a cotton-plaiting, in a wooden pocket from the Chiriguano. The Indians use such for tinder when striking fire with flint and steel. The idea of this was of course obtained from the Whites.
C
[377]

C
ce
415
171*

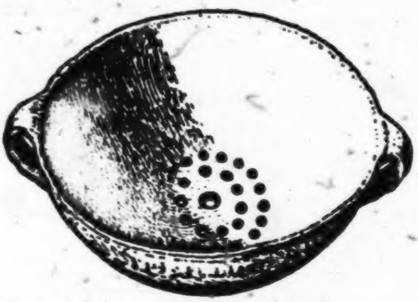


Fig. 16 a. Upper part of the steaming apparatus. The specimen given here is from the Mataco-Vejos, who learnt to use it from the Chané. R. M. M. 1022.

IX.

Utensils used in preparing and consuming food.

The Chiriguano and the Chané have large wooden mortars with long wooden pestles. Hand-mills of stone or any other material are never used. The geographical distribution of the mortar has already been dealt with in the first volume (map 10). Evidently the wooden mortar has come to the Chiriguano and Chané from the east. It is a northern and eastern element of S. American culture. Among the Chiriguano one sometimes sees mortars hollowed out in stumps of trees. It is obvious that the Whites did not introduce the mortar here from the fact that it was mentioned by such early author as Schmidel from the Syeberis in North Chaco.

C
ce
415
171*
[412]

Both the Chiriguano and the Chané sift and strain through a round basket, the »urupé» (fig. 52). The following table shows us how sifting and straining is done by the tribes I have visited. Some tribes use four-sided sieves and strainers.

C
ce
252
415
171*
A
[415]

O
Ce
252
415
*171
A
[415]

Table 7.

	A net-bag	Yuracáre type[2])	Square Sieve	Urupé	Through coarse cloth
Ashluslay	—	—	—	—	—
Atsahuaca	?	?	?	—	—
Aymara	—	—	—	—	+
Cavina	?	?	—	—	—
Chacobo			—	—	—
Cháma	?	?	—	—	—
Chané	+	—	—	—	—
Chimáne	—	—	+	+	—
Chiriguano	—	—	—	+	—
Choroti	+	—	—	—	—
Guarayú (mission)	—	—	—	+	—
» Pauserna	—	—	—	?	—
Huanyam	—		+	—	—
Huari	—	—	—	+[1])	—
Mataco	+	—	—	—	—
Quichua	—	—	—	—	+
Tambopata-Guarayo	?	?	—	—	—
Tapiete	+	—	—	—	—
Toba	+	—	—	—	—
Yamiaca	?	?	—	—	—
Yuracáre	—	+	—	—	—
Itonama	—	—	—	—	—
Baure	—	—	—	—	—

From the literature I know of the urupé from the Paressi[3]), the Indians of the upper Rio Xingú[4]), the Indians of the Roraima district,1) the Indians of northwestern Brazil,2) the Maquiritare3) and the Uitoto.4)

---

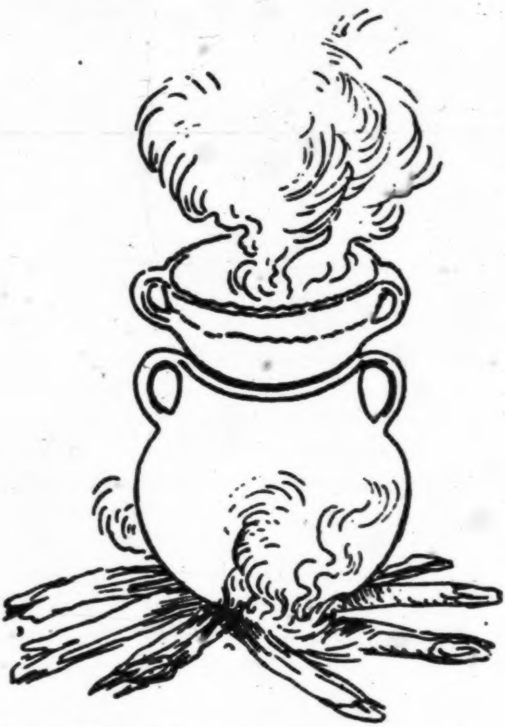
[1]) Not obtained.

[2]) See Nordenskiöld (9) Fig. 32.

[3]) Max Schmidt (4) P. 209.

[4]) Max Schmidt (3) P. 350.

C
ce
415
171*
252



ce
252
415

Fig. 16 b. Steaming apparatus. Chané, Rio Itiyuro.

C
ce
252
415
171*

The Urupé is obviously a northern cultural element. It is certainly not from the western culture zone. GARCILASSO5) says that the Inca sifted through cloth, or rather

---

1) G. M.
2) KOCH-GRÜNBERG (2) Vol. 2, P. 217.
3) R. M.
4) WHIFFEN Pl. XXII.
5) GARCILASSO Libro VIII. Chap. IX.

e
Ce
252
415
*171
[412]

that they fanned the flour. They had no proper sieves. As we have seen from the table, the Chaco tribes have no basket-sieves, but use bag-nets instead.

Mandioca-graters do not occur among the Chiriguano and the Chané.

Ce
252
415
273

Of course the Chiriguano and the Chané cook their food in earthern ware. Maize-beer »Chicha», their chief food, is boiled in large vessels. It is only with great difficulty that these can be moved from one place to another[1]). Some of the Chiriguano occasionally allow the maize-beer to ferment in hollow stumps of the bottle-tree.

c
Ce
252
415

The steam cooking-pot shown here (fig. 16) is of very great interest. It is used by the Chané and Chiriguano in cooking a certain dish of maize, the »huintimimmo».[2])

I have seen this contrivance being used as shown by the illustration, but I have, unfortunately, not tasted the maize-dish that was cooked in it.

e
Ce
252
415
*171

In literature dealing with other parts of S. America I have only found this steam cooking pot mentioned by ULLRICH[3]) from the Rio Grande do Sul (Munizip Pelotas).

He there found pieces of »Siebtöpfen» and says that they were used on the top of a cooking-pot. ULLRICH[3]) tells us that these steam-cooking-pots were used by the

---

e
Ce
[172]
[437]

[1]) When fragments of very large and heavy earthenware vessels are found in archæological excavations one may, as a rule, presume that they originate from a permanently settled tribe. It may be assumed with perfect certainty that these very large vessels were made at the spot where they are found. Small earthen pots may, however, have been bartered from some other tribe. This is naturally of a certain interest if we wish to distinguish between native and imported pottery found in archæological excavations. — Some of the Chiriguano at the Rio Parapiti make only the big common clay vessels themselves and get the small, painted pots by barter from other Chiriguano Indians.

[2]) CORRADO when speaking of different dishes of maize says that »el *huintimimmo*, especie de torta muy tierna hecha con harina de maiz humedecida y blandamente dispuesta en una tortera agujereada y cocida con baho del agua caliente.» P. 42.

[3]) P. 500.

small Indian tribes in the woods north of the Rio Camaquam c ce
at the end of the decade 1870—80. The perforated 252
top bowl contained maize, the pot under it boiling water. 415

I cannot at present tell whence the Chiriguano and the 171 *
Chané got this cultural element. Besides among these Indians, I have also seen steam-cooking-pots of the same kind among the Mataco-Vejos, who live close to the Chané at the Rio Itiyuro.

The Chiriguano and the Chané have special bowls for roasting maize (fig. 16). I have only seen bowls of the same shape among the Mataco-Vejos. The roasting of maize is commonly practised among the majority of Indians who grow this plant, which is of such great importance to many tribes.

The Chiriguano and the Chané do not know of the c ce
babracot. They only use the wooden spit. It is often cleft, 252
as is also the case among the Choroti and the Ashluslay. 171 *
As the kinsmen of the Chané in Northern Bolivia and the kinsmen of the Chiriguano on the coast of Brazil use the
babracot, the question arises: »Why is it not used here?» c ce
I suppose this is because the hunting is of no great importance, [22]
the fishing not very good, and the fish caught small or, at least, rarely of any size.

Pit-ovens are unknown here. When chicha is being c ce 412
made. great pot-spades are used. They are either wooden 252
(fig. 17 A) or made of the hafted shoulderblade of some large [273]
mammal. I suppose all Indians who cook their food use something to stir it with. Usually, however, only a plain stick is used. Pot spades of the kind shown here are in c ce
use among the Mataco-Vejos, who live near the Chané on [171] *
the Rio Itiyuro and the Guató1) on the upper Rio Paraguay.
It is not unlikely at all that the latter have had them ce
from the Chané, for we know from accounts of very early [175
discoverers, that some of the Chané settled on the upper 361]

---

1) Max Schmidt (3). P. 205.

C ce 412 252 Rio Paraguay after Garcias marauding expedition, not far from the tract where the Guató now live.

Ce [170] [361] A potspade of the same type from the Yulămaua along the Rio Querary is shown in an illustration by KOCH-GRÜNBERG.1) I have not seen the shoulderblade potspade in any other tribe.

C ce 412 252 *171 Similar spades, said to have been used for agricultural purposes, are mentioned by ST. CRICQ2) from the Conibo.

C ce 412 415 264 177 Nowadays the Chiriguano and Chané for the most part eat their food with metal spoons which they have got from the Whites. They have, however, wooden spoons as well. They generally eat from earthenware bowls of their own make. They seldom have wooden bowls. I have already treated of the distribution of the wooden bowl and the wooden spoon. (Part 1 map 12 and 13.) They are features of western civilization. Calabash bowls are universally used by the Chiriguano and Chané as drinking vessels, particularly for chicha.

C 415 177 Silver bowls — »Cagua» — are occasionally seen at the Chiriguano festivals. These bowls, which are shaped like cloven calabashes, are often furnished with small ears and are made by mestizo smiths to suit the Indian taste.

C ce 415 [439] There is in my collection a calabash bowl that has been turned into a ladle by means of a handle. It is from the Chané at the Rio Itiyuro. I have also procured some bowls made of the fruit of the calabash tree from the Chiriguano. The Indians get them from Sta Cruz de la Sierra, for, as far as I know, the calabash-tree is not cultivated within their own area.

C ce 372 137 *171 Fire-fans of plaited palm leaves are used, though they are rather uncommon. These fire-fans belong to the cultural elements which have come to the Chiriguano and the Chané from the north and east. Later on, when writing about the Indians in northeastern Bolivia, who have sev-

---

1) T. 2. P. 209.

2) P. 287

Se
372
137
171*

eral different kinds of palm leaf fans, I will deal with them in detail.

At present I can refer to what Pater Schmidt[1]) has written about the geographical distribution of fire fans of plaited palm leafs in S. America.

C
412

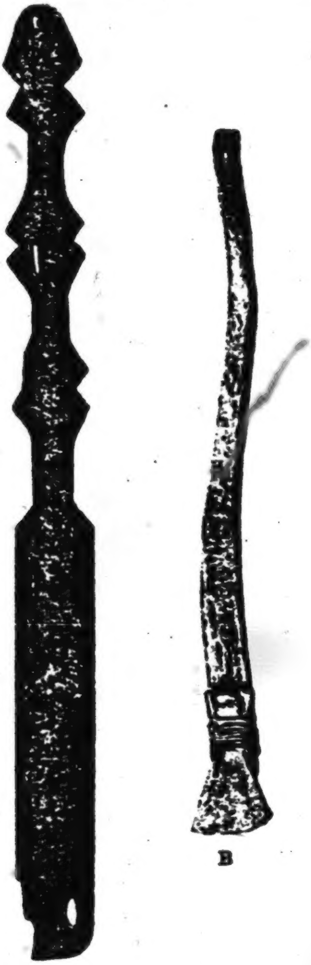


Fig. 17. Potspades.
Chiriguano.

A from Tihüipa. $^1/_8$. R.M. E. 505.
B from Caipipendi. $^1/_6$. R. M E. 596.

---

[1]) P. 1082.

C
276

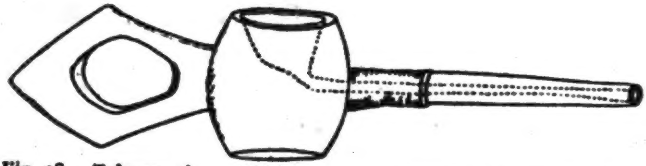


Fig. 18. Tobacco-pipe. Chiriguano. Caipipendi. 1/2. R. M. E. 312.

X.

Narcotics.

C
ce
276

The Chiriguano and Chané are not great smokers like the Choroti and Ashluslay. They are most addicted to the cigarette, and seldom smoke a pipe. Only a few of the former who live on the territory adjoining the Quichua chew coca, which, so far as I know, they do not cultivate themselves. It is a well known fact that the habit of chewing coca is a western culture-element.

C
ce
*[171]

I have given an account in Part I of the geographical distribution of the tobacco-pipe (map 14).

The type of pipe depicted here, on which the bowl is fixed near the middle of the stem and which, by the by, is very convenient to handle, seems to me to have a south-westerly distribution in S. America.[1] During my archaeological excavations at Caipipendi I found similar pipes of burnt clay. The front stem of these latter pipes has no hole for the finger. This hole is a little refinement which I have seen nowhere except among the Chiriguano. Quite simple pipes are also found among the Chiriguano, consisting of a bowl with a straight stem behind and no front stem. From the Chané I have one single pipe. This is evidently quite modern. In drawing Map 14 in Part I. I have not taken this pipe into account, as its origin is somewhat uncertain.

---

[1] Nordenskiöld (3 b) P. 293. See also Uhle (10) P. 48. (a pipe from Taltal).

XI.

Dress.

The Chiriguano and the Chané men of the present day wear European clothes which they buy at the stores, get at the missions, or, more often still, when working at the sugar factories in northern Argentine. The native garments, the loin-cloth (chiripa) (fig. 19) and the ponchoshirt are still occasionally seen. The loin-cloth is a rectangular piece of cloth which is passed between the legs and kept in place back and front by being tucked into the belt. The geographical distribution of the loin-cloth in S. America it is almost useless to endeavour to show on the map, as in many places it would not be possible to say if it was native Indian or not. Among the tribes visited by me, with the exception of the Chiriguano and the Chané, I have only seen it among the Tapiete. I have a piece of cloth from the Tsirakua that may have been a chiripa. I found a doll in a mound in Mojos which most likely represents a man with a chiripa. That it is a very old cultural element is obvious from the fact that the curious mummies found by Uhle[1]) at Arica and belonging to the oldest culture periods there, wore the chiripa. In the museum at Gothenburg[2]) we have a mummy of the kind, found by Skottsberg at Arica, which wears a chiripa. This chiripa is not woven, but is netted.

C
Ce
291
[177]

C
Ce
291
171*

The Poncho-shirt which I dealt with in detail in the first part of this book is undoubtedly a cultural element which has come to the Chiriguano and the Chané from the civilized zone in the west. (See map 16 in Part I.)

---

[1]) (6)

[2]) G. M.

C ce 291 *171 On very rare occasions one sees clothes of tanned skin worn by the men. As far back as CHOMÉ[3]) these skin clothes

ce [142] [302]

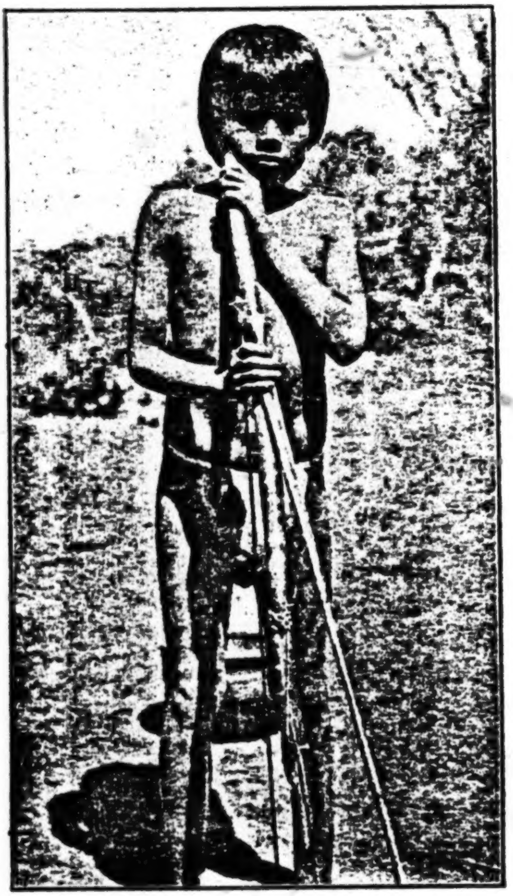


Fig. 19. Chanéboy in »chiripa». Rio Parapiti.

C ce [177] [126] were mentioned. I have obtained a costume of the kind consisting of a coat, breeches, and a hat. They are

---

[3]) P. 330.

C
Ce
291
171*
[177]
[126]

of European cut and have most certainly come from the Whites. According to Nino[1]) they were also sometimes made by the Indians themselves. I do not think this is the case with the costume I have collected.

Ce
302
291
142

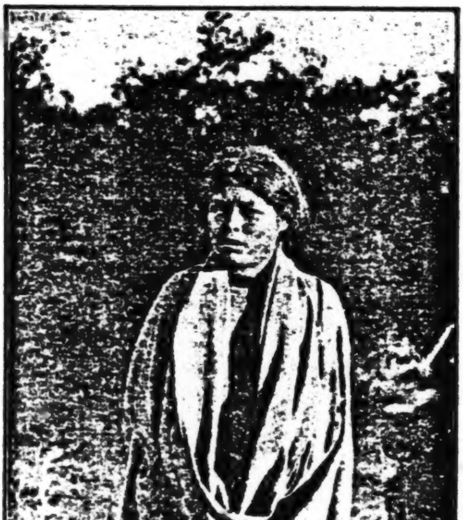


Fig. 20. Chanéwoman in Tipoy. Rio Parapiti.

Ce
291

The »tipoy» is the typical dress of the Chiriguano and Chané women. It is a sack of cotton or wool open at both ends and woven without seam. The tipoy for every day wear is of normal length. (Fig. 21) On festive oc- 000

---

[1]) P. 189.

Ce
291
854
482

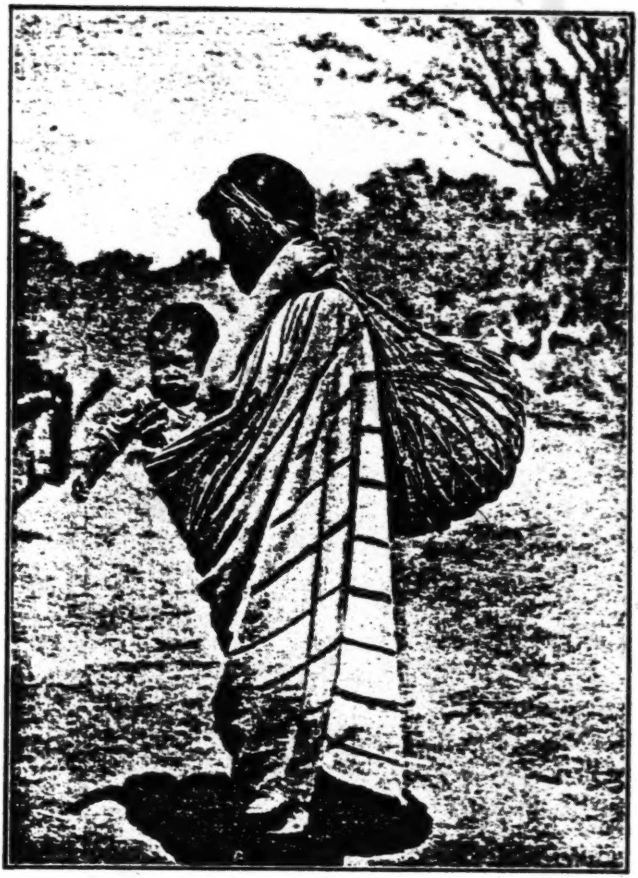


Fig. 21. Chanéwoman in Tipoy that is also used as a bearing-band.

Rio Parapiti.

Ce
292

On festive occasions they use a very long tipoy of cotton that has to be worn double.

Ee
291
171*

In Part I I have mentioned the tipoy, which is always a woman's garment, from the above mentioned tribes, [i.e., Chane and Chiriguano women. -Analyst]

c
ce
171 *
291

and from the Ashluslay, Guarayú-Pauserna, Siriono, Guarayú (mission) Gorocotoques, Mojo, Carios-Tupinambá, Quichua, Paressi-Kabiši, Chiquitos, Guarani in Paraguay, Xarayes, Guayaná and Payaguá. Occasionally they occur among the Mataco as well. Barbosa Rodrigues mentions the tipoy from the Tembé. Judging by Lange's photographs the Ararandeuara girls seem to wear small tipoys in ordinary hammock technique.

c
ce
[114]

Those from the Quichua do not, however, correspond to others whose style we know, for the former used to be open on one side and only seem to have been sewn up under the influence of European ideas of modesty. Consequently I was rash in concluding that the tipoy was an original feature of western civilization, as I did in the first part of this book. Most likely it is of quite a different origin.

When the Chiriguano and Chané women used the tipoy as a garment, they did not, as we shall see below, get the idea from the mountains or from the Whites. It is, however, certain that the Whites and at an earlier date the Mountain-culture Indians may have influenced them to make the tipoy longer and more »seemly». Contact with other people wearing clothes has made it fashionable to be clothed.

c
ce
291
114
171*

My attempts to investigate the distribution of the tipoy in northern S. America has caused me a lot of trouble. Descriptions of Indian apparel by early authors are, unfortunately, not as detailed as might be desired. Oviedo mentions a woman's dress »saya» from the region of Lake Maracaibo, woven without seam »sin costura», which may have been a tipoy.

In a narrative of Pedro Texeira's journey up the Amazon[1]) we read that almost every tribe goes naked, the men completely, the women above the waist, covering the rest

---

[1]) T. XIII, P. 437.

C
ce
291
114
*171

of the body with a garment resembling a »pampanilla». This may mean the tipoy, but also something else[1]).

C
ce
291
854
*171
482

As MAX SCHMIDT[2]) has pointed out, the Paressi make their tipoys and their bearing-bands (to carry the children) in exactly the same way. The bearing-bands used by these Indians are identical with the tipoys in both shape and material. They differ from the latter only in being somewhat longer in proportion to their width. STADEN[3]) speaks of the »typpoy» as a garment. In an anonymous early description, also from the coast of Brazil, printed in PURCHAS[4]), the bearing-band is called »tupiya». The same word is thus used by the Guarani-speaking Indians on the coast of Brazil both for the bearing-band and the female dress. In some parts the same article has, indeed, been used both as a bearing-band for children and a woman's garment. According to BARBOSA RODRIGUES[5]) it would seem to be so among the Tembé Indians. The bearing-band does not occur among the Chiriguano and Chané; they carry the child cradled in the tipoy.

C
ce
291
482
*171

I do not consider it too bold to assume that the tipoy and the bearing-band have the same origin, and that the one has suggested the other. In all likelihood, the bearing-

---

[1]) It is obvious from the following quotation from OVIEDO (T. 2, P. 271), where he tells of the female apparel of the Bubores living near Lake Maracaibo that the »Pampanilla» also might mean a small piece of cloth covering the genitals. »y las mugeres una pampanilla ó pedaço de algodon texido tan ancho como un palmo colgando delante de sus vergüenças».

[2]) (4) P. 218.

[3]) T. 2, P. 3. »/derselbigen wilden weiber machen dinger von baumwollen garn/ wie ein Sack vnden unnd oben offen/ die ziehen sie an/ und heyssen auff ire sprache Typpoy».

[4]) P. 1391.

[5]) (2) P. 42. »As mulheres . . . . . usam uma facha larga de algodão tecido branca ou tinta de urucu, passada a tiracollo sobre o hombro direito, que pendendo sobre o corpo, encobre-lhes a parte vergonhosa e serve para nella trazerem constantemente filhos. Dão a esta facha o nome de *tupôy*»

c
ce

291/
171*
482

band, which has a much wider distribution, is the original. For some reason it was occasionally worn as a shirt and, finally, in some places, this became the custom. Out of the short skirt resembling the bearing-band has probably developed the long tipoy now worn by the Chiriguano and

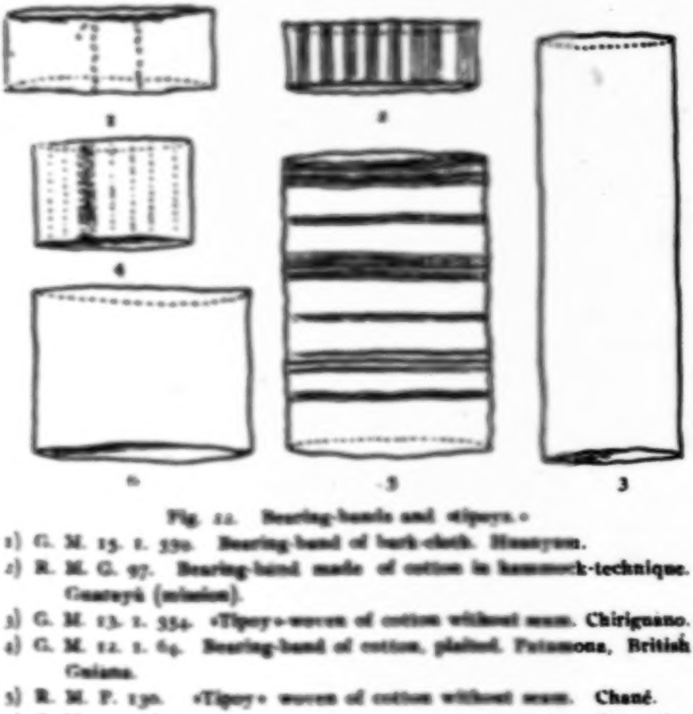


Fig. 22. Bearing-bands and »tipoys.»

1) G. M. 15. 1. 550. Bearing-band of bark-cloth. Huanyam.
2) R. M. G. 97. Bearing-band made of cotton in hammock-technique. Guarayú (mission).
3) G. M. 13. 1. 554. »Tipoy» woven of cotton without seam. Chiriguano.
4) G. M. 12. 1. 64. Bearing-band of cotton, plaited. Patamona, British Guiana.
5) R. M. P. 130. »Tipoy» woven of cotton without seam. Chané.
6) G. M. 13. 1. 849. » » » » » » Guarayú.

Chané. The shape is still the same as that of the bearing-band; only the proportion between length and breadth has been changed (fig. 22). The bearing-bands used by S. American Indians are either made of bark-cloth, plaited in the ordinary hammock-technique, or made in some other

C
Ce
291
482
*171

way. The tipoys are, as a rule, woven. Tipoys manufactured in hammock-technique I know of only from the Siriono and the Ararandeuára (Tembé). These latter are also used as bearing-bands. Probably this is also the case among the uncivilized Siriono. Tipoys in this technique are probably earlier in origin than the woven ones.

C
Ce
352
196
291
482

The word »tipoy» has also been used with another meaning, viz., for a band used to support an injured arm.[1] A band or sling of the kind has exactly the same shape as an Indian bearing-band. Only once can I remember having seen an Indian with his arm in a sling like this. He was a Pauserna man.

»Tipoya» can also be interpreted »a kind of hammock».[2]

C
Ce
352
854
482
*171

The question is if the hammock has not also been suggested by the bearing-band. In the first place we must remember that Indians also in different parts where the hammock is unknown, are careful not to put their babies on the ground. Thus, the Yuracáre and the Chimáne who have no hammocks, use cradles of bark-cloth in which they suspend their babies. When the Mosetene woman goes to work in the fields with her baby, she puts it into a bearing-bag which she hangs up in a tree. COMINGES[3] mentions that he saw among the Guaná Indians, who seldom use hammocks, a child which the mother had placed in a bag slung like a hammock. So it does not seem so very unreasonable to suppose that Indian women tried to use the bearing-band in the same way when the child had to be

---

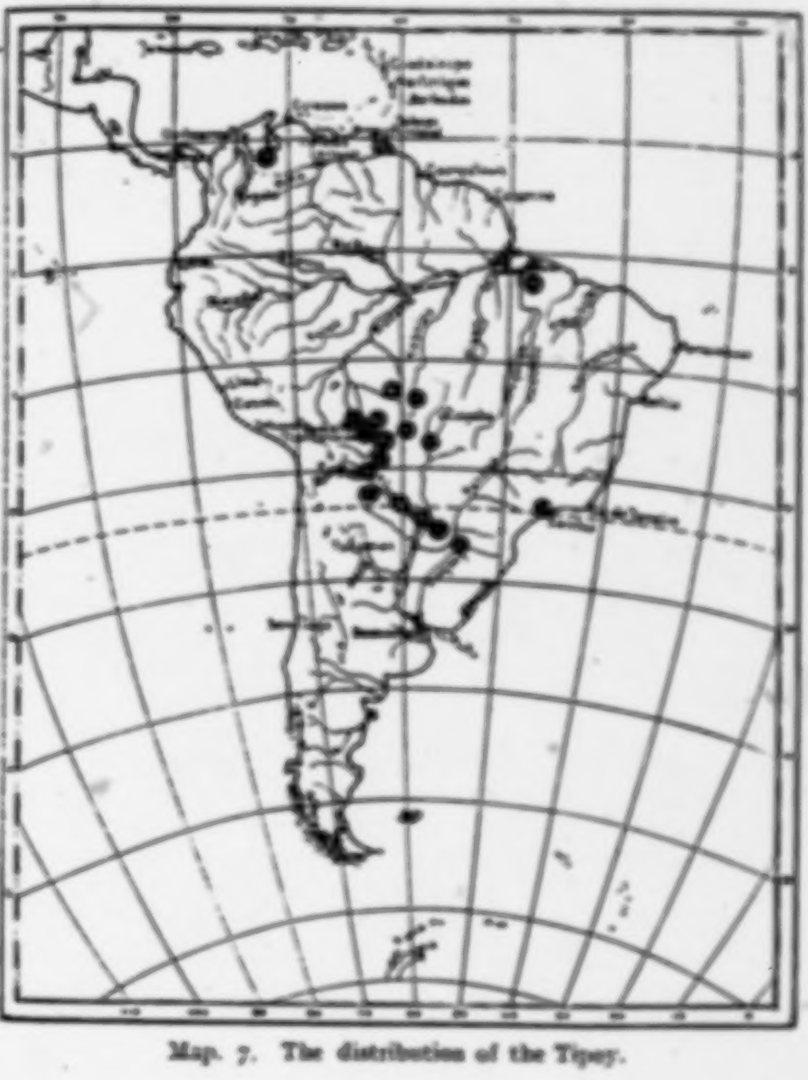
[1] [2] I here give BRAZ DA COSTA RUBIM'S definition of the word TIPOIA »Do guarani tupoi, vestido de mulher. Tira larga tecida com palha de miritizeiro; grande camisa sem mangas feita do entrecasco de certas arvores de entrelaçada e estopenta fibra; o lenço o tiracolo para descansar o braço; serpentina de rede carregada por dous homens.»

[3] »En uno de éstos una mujer joven que parecía una criatura, pero que, acabando de dar el pecho á un niño completamente desnudo, y colocándole en una bolsa de red, que á manera de hamaca pendía de las *tacuaras* del techo.» P. 192.

[text continues on p. 68]

Nordenskiöld E-3,4 (1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8
South American Indians 53

c
ce
102
291
*171
S
102
291



Map. 7. The distribution of the Tipoy.

C
CC
32
15
*191

put down and they feared the snakes. The Guarayú have bearing-bands which are made in the very same technique as most hammocks. Such bearing-bands were also used by the Carios¹) in Southern Brazil.

Table 8.

The distribution of the tipoy. Map 7.

C
CC
291
*191
102
6
102
281

1. Ashluslay, G. M. Woven without seam. Wool.
4. Chiriguano, R. M. E. 8. Woven without seam. Wool or Cotton.
5. Chané, R. M. P. 130. Woven without seam. Wool or Cotton.
6. Mataco, R. M. M. 166. Woven without seam. Wool.
20. Paressi, Max Schmidt (4) P. 217. Woven without seam. Cotton.
25. Mojo, Castillo P. 324.
38. Carios, Staden.
40. Guarayú (Guarayos).
41. Guarayú (Pauserna), G. M. Woven without seam, cotton
43. Corocotoque, Schmidel (1) P. 264.
51. Siriono. Made in hammock technique.
94. Chiquito, Burgess P. 341.
98. Ararandeuára. (Tembé). I have gathered from Lange's photographs that Ararandeuára-girls wear quite short Tipoy in ordinary hammock technique; Barbosa-Rodrigues (1) P. 42.

I. Guarani, Paraguay. Azara (2) P. 416.
5 P. Xarayes, Núñez Cabeza de Vaca. T. 1, P. 300.
X 4. Payaguá. Azara (2) P. 380.
I F. Indians near Lake Maracaibo. Oviedo Vol. 2, P. 283. «Tomamos unas indias vestidas unas sayas tejidas sin costura, que les tomaba desde la cabeza hasta los pies, e unos capillos como de freyles».

---

¹) Staden (2) Fig. P. 132.

Both men and women among the Chiriguano and Chané have sandals which, however, they seldom wear. In Part I of this work I have given an account of the geographical distribution of sandals in S. America. Obviously sandals are a cultural element which the Chiriguano and Chané have got from the area of civilisation in the west.

Cc 291

Cc [177]

A pair of sandals with fastenings differing from the usual kind are depicted here. A sandal with very similar binding but of another shape is described and depicted by Eric von Rosen[1]) in his recent, splendid work.

Cc [177]

The Chiriguano and Chané wear girdles which as a rule are woven, though they are sometimes made of leather. As I pointed out in Part I, the woven girdle belongs to the western cultural elements and the leather belts to the southern. The leather girdles worn by the Chiriguano and Chané are provided with pockets and sometimes ornamented with coins, and are consequently imitations of the gorgeous cinturon worn by the Argentine gauchos. Nino[2]) is of the same opinion, and he points out that they are called »bosa« (from the Spanish word »bolsa«[3]) owing to their being provided with a pocket.

Cc 291/177

As already mentioned in Part I the woven »head-band« or frontlet also belongs to the dress of the Chiriguano and Chané-men. The frontlet is certainly a western culture-element.

Chiriguano and Chané shirts and ceremonial tipoys are of native make and are often dyed blue with indigo. The frontlets are blue or red. Chiriguano and Chané women wear a kind of hair-band with tassels which they most likely learned to make in the missions.

Cc [286] [292] [177] [177]

---

[1]) l. c. Fig. 84, P. 297.

[2]) P. 190.

[3]) »Bolsa« is »bosa« in the Chiriguano language as these Indians do not pronounce l.

CE
291
177

The Chané men at the Rio Parapiti occasionally wear straw hats plaited by themselves. They most certainly borrowed the idea from the Whites.

C
291

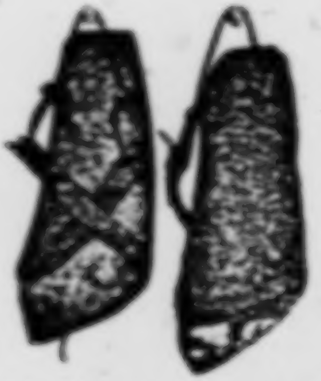


Fig. 23. Sandals of leather. Chiriguano. R. M. E. 63.

C
302
301
142

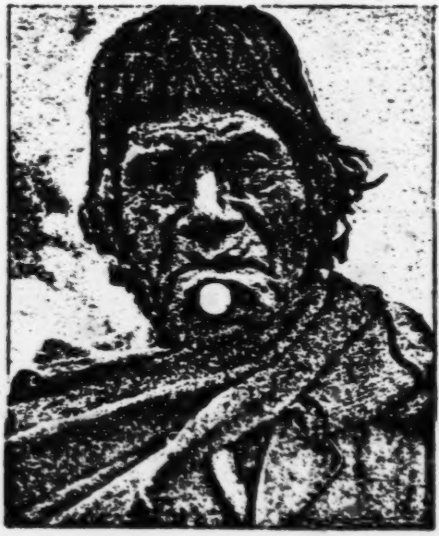


Fig. 24. Old Chiriguano Indian with a big »Tembeta. Tihüipa, Bolivia.

XII.

Articles connected with the deformation of the body. »Tembeta».

C
Ce
301

All Chiriguano and Chané men of the older generation and, in a few of the Chiriguano villages, the younger men and boys also wear a so-called *tembeta* or lip-button in the under-lip. The custom of boring the lips is wide-spread in S. America. Dall, Denis, Netto, Uhle and Verneau-Rivet have drawn up summary tables to which I beg to refer, at the same time making some additions based on notes I have made from the literature on the subject to which I have had access.

C
Ce
[304]
[171] *

The tembeta of the Chiriguano and Chané Indians is made, as a rule, of tin and in shape reminds one of a cap with a peak at both the front and back. (fig. 25)

C Ce 301 The back is somewhat concave enabling it to rest conveniently on the chin-bone. The front is round and flat and does not project beyond the lip. The metal is hollowed at the front and filled with wax, in which are fastened green or blue stones or glass beads of the same colours. In a grave at Caipipendi I found a tembeta of wood of the shape here described, in which a round piece of green glazed earthenware is inserted. For every-day use both the Chiriguano and Chané sometimes have lip-buttons of wood which C Ce [175] are shaped like flat wooden cylinders. The Chané usually have smaller lip-buttons than the Chiriguano. CHOMÉ[1]) mentions lip-buttons of resin among the latter Indians from the 18th century.

C Ce 301 *171 I make no attempt here to show on the map the distribution of lip-boring in S. America.[2]) As was mentioned, it is very considerable. The idea of inserting stones or beads fastened with wax in the tembeta is almost confined to the Chiriguano and Chané.

C Ce [177 114] It might almost be suspected that they got this idea from the Whites, who now have an extensive manufacture of metal tembetas in order to sell to the Indians. This is not the case, however, for SCHMIDEL writes of the Karkhokhies (Gorocotoques)[3]) who dwelt in N. W. Chaco: C Ce 301 *171 175 — »Pero sus mujeres tienen un canutillo asegurado à los labios en el que meten ellas una piedra verde ó gris». Of what material this »canutillo» was, we are not informed. In Chili[4]) a tembeta of stone has been found with a cavity in which possibly another stone or the like had been set.

The metal tembeta is here probably, though not neces-

---

[1]) P 331

[2]) (This) because few of the old writers have given any detailed description of lip-buttons.

[3]) (1) P 264. (2) P. 94. »Ihre weiber aber habenn ein kleins rörlein gemacht in denn lepzen, darein sie ein grienen oder grabenn chriestallen stein stechenn.»

[4]) MEDINA (1) Fig. 77. From Preirina.

E2
301
171*
[175]

sarily, post-Columbian. CASTILLO[1]) mentions silver tembetas from Mojos as early as the 17th century, and in Ecuador a tembeta of gold has been found.[2]) CHOMÉ[3]) writes of the Chiriguano: »Les hommes se percent la lévre inferieure, ils y attachent un petit cylindre d'étain, ou d'argent ou de resine transparente.» It is not impossible that the Indians of this part, viz. the Chané, had lip-buttons of silver in pre-Columbian times.

The highly specialized type of tembeta which I have here likened to a cap with both front and back peak, is not now found in use in S. America elsewhere than among the Indians here dealt with and some few Tapiete who learned its use from the Chiriguano.

Similar tembetas of stone have been found at the Rio Negro in Patagonia[4]), in San Juan[5]) in Argentine, in central Chili[6]), at Tiahuanaco[7]); at Parana-Mini[8]), Minas Geraes[9]) and Pernambuco[10]). Here may also be included a tembeta of gold described by RIVET and VERNEAU from Chordeleg in Ecuador. This type of tembeta is also found in Mexico and in western N. America. This lip-button is best characterized by saying that, when inserted in the lip, it looks like a round disc.

The type of lip-button most closely resembling those described here, have a more or less spike shape when seen from the side. While the Chiriguano tembeta projects either not at all or very slightly beyond the lip, in the spike-shaped c ce 301 *171 tembeta one sees a point projecting slantwise more or less beyond the lip in a downward direction. The cross-piece which prevents the lip-button from slipping out does not broaden into a flat disc approximately following the shape of the chin. Length, shape and material may vary considerably.

---

[1]) P. 320.
[2]) RIVET (4) and VERNEAU Pl. XXIV, Fig. 10.
[3]) P. 331.
[4]) LEHMANN-NITSCHE (4).
[5]) DEBENEDETTI (4) P. 58.
[6]) MEDINA (1); UHLE (9) P. 8.
[7]) UHLE (1) Vol. 1, Pl. 19, Fig. 23 and 24.
[8]) DEBENEDETTI (4) P. 57.
[9]) NETTO Pl. 8.
[10]) » »

c ce 301 287 The oldest type of lip ornament probably consisted of feathers, etc., fixed in a hole in the underlip. To keep this hole extended, it was ordinarily filled by a wooden plug or the like. This consisted, like the everyday tembeta of the Chiriguano and Chané, of a plain wooden cylinder. This shape was subsequently changed and more ornamental material substituted for the wood. Some tribes merely made the wooden plug bigger and bigger, e. g. the Suyá[1]), Botokuds[2]) and Lengua.[3]) As a rule it was, no doubt, not very hard to make the wooden plug stay in the hole. *When it was exchanged for more ornamental material such as resin, and, above all, stone, it became necessary to give the tembeta such a shape as would prevent it slipping through the hole.* The Chiriguano Indian wooden tembeta is merely cylindrical; the heavy metal tembeta is cap-shaped.

c ce 301 *171 The Huari tembetas of wood are likewise cylindrical. The upper part of the smoother tembeta of resin is made thicker, so that it cannot slip through the hole.

The Chiriguano and Chané evidently have a very specialized form of tembeta which would appear to be fairly late. Its distribution over the continent of America does not, however, support this view. The type is found in Mexico and N. America as well as in S. America. The question arises whether we may not, in this case, imagine a parallel evolution. Wherever the attempt has been made to make tembetas of heavier material than wood, *it has been found necessary to make them more or less T-shaped*. It is in fact, the only possible shape. It was quite natural that both in N. and S. America the tendency was to shape the tembeta in such wise that it should lie conveniently on the chin-bone.

---

[1]) Karl von den Steinen (2).

[2]) Wied.

[3]) Azara (2) P. 391.

C
ce
301
171*

The most highly specialized type of tembeta is found along the Rio Araguaya among the Karajá and Kayapó.[1] There are in those parts a number of different types of lip-button, and it is natural to ask whether such a variation of tembeta types was not formerly common in other parts. In other districts where the Indians still wear tembetas there is no similar variation in type. One sees only two or three different types. Nor it is likely that type-variations of stone tembetas have been much greater than is indicated by the material hitherto collected. The distribution of stone tembetas, on the other hand, may have considerably exceeded what we know at present.

Krause[1]) has pointed out how different kinds of tembetas are worn at different ages among the Karajá. The Chiriguano when merely boys wear the wooden plug. Lery[2]) says that the Tupinambá boys had bone tembetas of conical shape. When they were full-grown (attained puberty?) they received tembetas of stone which, in part at least, had a shape similar to that of the Chiriguano and Chané tembetas. Very likely the narrower, spike- shaped tembetas which Debenedetti[3]) described from San Juan were for boys' wear, while those which resembled the Chiriguano and Chané tembetas were for grown-ups.

C
ce
554
301

A writer as early as Vaas de Caminha[4]) mentions various kinds of tembetas among the Indians whom Cabral met with when he came to the coast of Brazil.

C
ce
301
171*

It is evident that the spike-shaped tembetas belong to an older era of civilization than those of capshape. The

---

[1]) Krause P. 220.

[2]) P. 191.

[3]) (4) P. 58.

[4]) P. 180 a, 180 b, 180 d, 180 i, 180 l.

c
ce
301
*171

former have in S. America a much wider distribution than the latter. When both types existed together, as was the case among the Tupinambá, the boys had to be content with spike-shaped variety, while the men had the cap-shaped. For the latter kind a specially valuable material was employed, viz. a rare kind of green stone.

In all likelihood it was from the Andine area of civilization that the cap-shaped tembeta spread to Patagonia to the Chané, Chiriguano and Tupinambá. This must have happened before the time of the Incas. At the time of the conquest the Incas had no tembetas. The discovery of tembetas of this type at Tiahuanaco supports the notion that we have here to do with a culture-element which spread south and east during the Tiahuanaco period.

Should an attempt be made to draw a diagram showing the evolution of tembeta-types, I imagine it would be pretty much as follows (fig. 27).

Out of the small cylindrical wooden plug which still occurs everywhere for the purpose of keeping the lip-button hole open, and to extend the same, three types have been specialized:

(1) The exaggeratedly large, flat, round wooden disc;
(2) The more or less spike-shaped lip-button;
(3) The flat cap-shaped tembeta.

Of these (1) is most likely the oldest, (2) next and (3) the most recent.

If the cap-shaped tembeta in this part of America comes from the Andine area of civilization, the Chiriguano have probably taken it westwards again. The Chané generally have quite small tembetas, this being the reason why they are scornfully called by the Chiriguano «uñareta» (women).

ce
[777]

It is probable that they learned the use of this ornament from the Chiriguano. Of the Chaco tribes visited by me it is only the guaranized Tapiete who have tembetas.

c
ce
304
301

The Chiriguano and Chané men never pierce their ears.

Formerly the chiefs wore ear-rings with pendants of green stones. Among these Indians the only women with pierced ears are a few of the younger ones who have learned from the Whites the custom of wearing ear-rings. These ornaments are also obtained from the Whites. Oddly enough, the barbarous custom of piercing the ear is thus here an idea obtained by the Indians from the Whites. Neither men nor women pierce the nasal septum.

C
ce
301
304
[477]

C
ce
301
171*

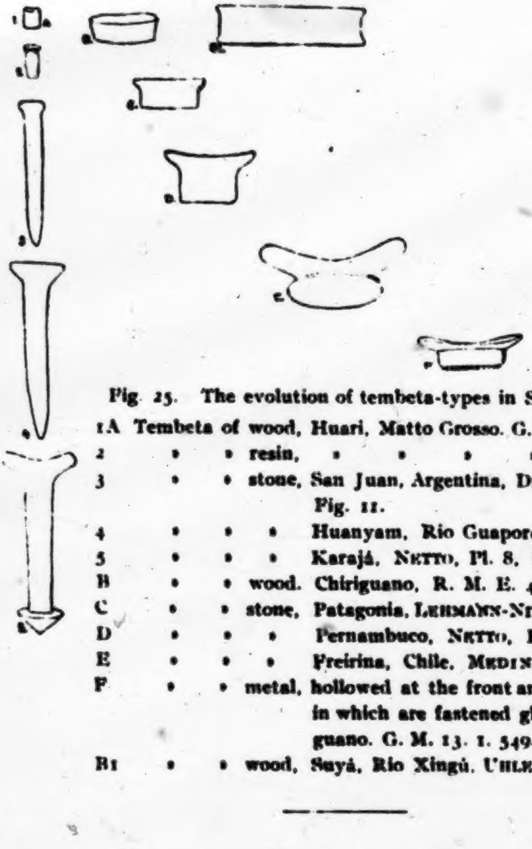


Fig. 25. The evolution of tembeta-types in S. America. $^1/_3$.

1A Tembeta of wood, Huari, Matto Grosso. G. M. 15. 1. 334.
2 » » resin, » » » » 16. 1. 290.
3 » » stone, San Juan, Argentina, DEBENEDETTI, (4) Fig. 11.
4 » » » Huanyam, Rio Guaporé.
5 » » » Karajá, NETTO, Pl. 8, Fig. 6.
B » » wood. Chiriguano, R. M. E. 469.
C » » stone, Patagonia, LEHMANN-NITSCHE (4), P. 286.
D » » » Pernambuco, NETTO, Pl. 8, Fig. 4
E » » » Freirina, Chile, MEDINA (1), Fig. 16.
F » » metal, hollowed at the front and filled with wax in which are fastened glass beads. Chiriguano. G. M. 13. 1. 549.
B1 » » wood, Suyá, Rio Xingú. UHLE (9) Fig. 34.

XIII.

Toilet-Articles, Tattooing etc.

c
ce
575
*171
174

The Chiriguano and the Chané are careful of their personal appearance. They are cleanly people, much cleaner than their neighbours. If these tribes had emigrated from the cold Bolivian mountains into their present territory, part of which is very poorly watered, they certainly would not bathe once, or even several times a day, as they do, but would be as dirty as the Quichua and the Aymara, who are, incredibly filthy. Their Chaco neighbours, too, the Mataco are also extremely dirty. In the parts I have explored it is only in Mojos that we find Indians as cleanly as the Chiriguano and Chané, these being the Mojo and the Baure, kindred tribes of the Chané. On the other hand the Guarani Indians in North Bolivia, the Guarayú, are less clean, even if they are among the »clean ones». The Guarani in Paraguay are, however, said to be very cleanly. The cleanliness of the Chiriguano and the Chané is a positive proof that they migrated to the territory now inhabited by them from warmer and well-watered parts, where bathing was pleasant and easily accessible. The Chiriguano and the Chané have not learnt to bathe from the Mestizos or the Whites, whose habits are anything but clean in these parts. Cleanliness is certainly not a virtue suddenly acquired by any people, but may indeed be regarded as a race-peculiarity. A map of S. American cleanliness would most certainly enlighten us on several points of interest with regard to the origin of the tribes. Now, when I read that the Mundrucú are very dirty I am sceptical of their being Guarani-Indians, and consider it much more likely that they are naturalized Guarani of a different origin. I shall not venture to give a map of S. American cleanliness

c
ce
[128]

C
here. In order to do so, it would be necessary for me to Ce
have seen much more of S. American Indians than is the 515 171 *
case. I will, however, here try to give the tribes I know a 174
certificate of cleanliness. I mark the dirtiest, the Aymara, 628
with o and Mojo, the cleanest, with 5. At the same time A
I will give them a certificate of orderliness, i. e. point [515]
out to what extent they keep their huts tidy and their belongings clean and neat. These 'certificates' are also of considerable interest as a means of understanding the cultural development and relations of the tribes.

I consider that a distinction should be made between Ce
the Chané who live on the Rio Itiyuro and those living on 515 184
the Rio Parapiti. The former are poorer and characteristically enough less cleanly than the latter. It is of a certain interest to see that skill in arts does not always go hand in hand with tidiness and cleanliness.

The more or less high standard of Indian art, at least
among present-day tribes in E. Bolivia, is dependent on C Ce
whether they have been influenced to a greater or less [777]
degree by pre-Columbian civilization in western S. America.

C
C2
515
356
*171
181
A
[515]

		Cleanness of body	Cleanness in and round the abode	Care of household, belongings, weapons, ornaments, clothes	Skill in art.
Ashluslay	El Gran Chaco near Rio Pilcomayo	2	0	1	3
Atsahuaca	Peru, tropical forests	3	3	3	1
Aymara	Andean Plateau, cold climate	0	0	0	5
Baure	Plains and tropical forests, Mojos, Bolivia	5	5	4	—
Cavina	Plains and tropical forests, near Rio Beni, Bolivia	3	3	3	2
Chacobo	Plains and tropical forests, Mojos, Bolivia	4	5	5	1
Cháma	Tropical forests, Rio Madidi, Bolivia	2	3	3	1
Chané (Itiyuro)		5	4	3	4
» (Parapiti)		4	4	3	3
Chimáne	Tropical forests. Bolivia	3	2	2	1
Chiriguano		5	4	3	4
Choroti	El Gran Chaco, near Rio Pilcomayo	2	0	1	2
Guarayú (mission)	Tropical forests, Bolivia	3	3	3	—
{Guarayú Pauserna	Tropical forests, Brazil	3	3	3	1
Huanyam	»	4	4	4	1
Huari	»	3	4	3	1
Mataco	El Gran Chaco	1	0	1	3
Mojo	Tropical forests and plains, Bolivia	5	5	4	—
Quichua	Andean Plateau	1	1	1	5
Tambopata-Guarayo	Tropical forests, Peru	3	3	3	1
Tapiete	El Gran Chaco	2	1	2	1
Toba	»	2	1	1	1
Yamiaca	Tropical forests, Peru	3	3	3	1
Yuracáre	Tropical forests. Bolivia	3	3	3	3

C
302

There are still many of the old Chiriguano, who wear long hair. Young men and youths with long hair are only

seen in the villages about the upper Rio Pilcomayo. When C 302
the hair is long it is not worn hanging down the back, as is
the custom with other Indians wearing long hair. It is
wound round the head, »put up», and kept in place with
a frontlet. I have not seen any other Indians do their hair
in this way. The women also have long hair, usually parted
down the middle and braided. Braiding may have been
introduced in post-Columbian times, though this is uncertain,
as it was also common in the culture-area of the west. C

The Chiriguano and Chané use combs, but no brushes. Ce
In Part I I have already dealt with different kinds of combs 302
met with in the districts through which I have travelled. 412
The Chiriguano only have plain wooden combs which are
sometimes rather prettily carved. This type of comb is Ee
probably derived from the mountain civilization, as I have [177]
already pointed out in Part I.

The Chané have »stick-combs», »Stäbchenkämme» Ce
and now and again, though rarely, plain wooden ones too. 412
These constructed combs are, as a rule, one-sided, in con- 171*
tradistinction to the doublesided ones of the Choroti and
the Ashluslay. Thus we see that the Chané type of comb
is unlike the one found in old tombs in the Puna de Jujuy,
and which now occurs among the Quichua and the Ayma- Ee
ra, the Choroti and the Ashluslay. Chiriguano and Chané [302]
combs are used exclusively for cleaning the hair and are [301]
never worn as ornaments.

The use of the pincer or tweezer as a toilet article cer- C
tainly came to the Chiriguano and Chané from the civilized Ce
zone in the west. They are of metal and are used for re- 302
moving hair from the body. Nowadays pincers are usually 412
made of the metal from some old tin can, but sometimes of [177]
silver. These pincers of silver also serve as breast orna- C
ments for the men, and are called »boivéra». They have to Ce
a great extent lost their original use, and are now simply 301
used as ornaments. They have even sometimes been ham- 412
mered together so that they can no longer be used as pin- 177
cers.

6

C
301
302
412
531

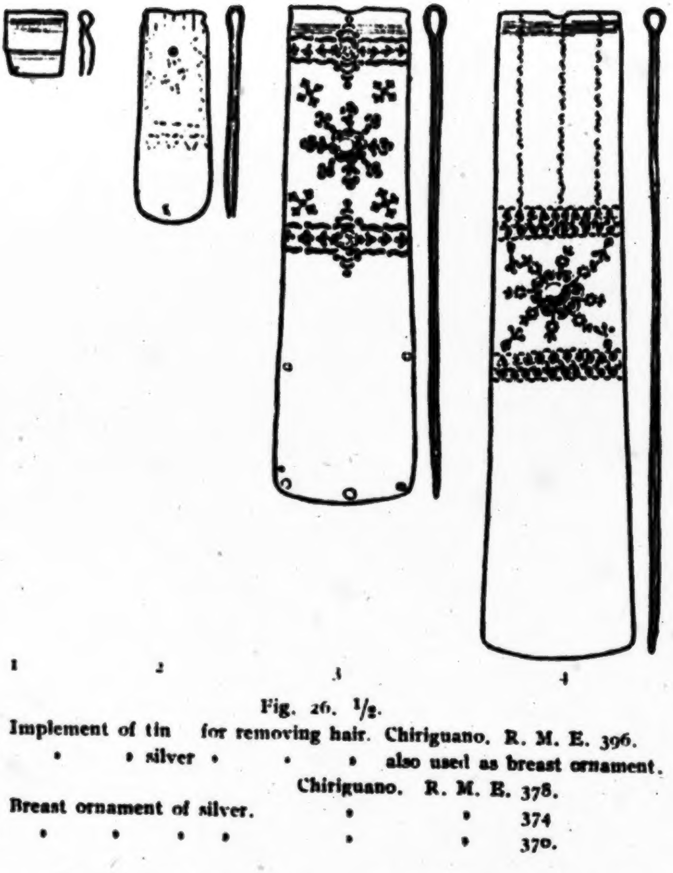


Fig. 26. 1/2.

1) Implement of tin for removing hair. Chiriguano. R. M. E. 396.
2) » » silver » » » also used as breast ornament. Chiriguano. R. M. E. 378.
3) Breast ornament of silver. » » 374
4) » » » » » » 370.

C
Ce
301
412
177
Ce
[531]

cers. They have become bigger and bigger. (fig. 26) These silver trinkets are not made any more by the Indians themselves, and it is likely that the majority of, or all the silver ornaments now found among the Indians have been made by white silversmiths.[1] The shape is always Indian, but the ornamental design not always so (fig. 26). It is difficult to decide whether the idea of the pincer as a mere breast ornament is due only to the influence of non-Indian smiths or not. Most likely the pincer was turned into mere ornament by the makers, who presumably used it as an article of barter and then increased its size in order to make it more and more coveted by the Indians. At last the makers themselves may even have been quite ignorant of its original use. Consequently we cannot be wrong in considering the »boivéra» an original Indian element of culture which has been transformed under the influence of

---

[1] Nino is also of the opinion that the »boivéra» is not of Indian make. P. 196.

c
Ce
301
442
177
[531]
c
Ce
[174]
[437]

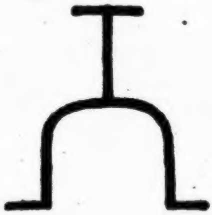


Fig. 27. Figure tattooed on the arm of a old Chiriguano Indian. ♂ Caipipendi. 1/1.

C
[531]
[304]

the Whites. There is no doubt that the pincer is a cultural element derived from the old culture zone in the west. They are, as we know, quite common in collections from that part. The Chiriguano also sometimes use a piece of split reed for removing hair.

C
[412]
[302]

Tattooing occurs here, but is very rarely seen. I have only seen two Chiriguano women and one old Chiriguano man with tattooing on their arms. The old man had the figure depicted here (fig. 27) tattooed on his arm. If I understood him rightly, it used in old times to be quite common for the Chiriguano-men to be tattooed in the same way. I have seen no tattooed Chané men or Chané women. I have already given an account of the distribution of tattooing in S. America in the first part of this book.

C
304
Ce
[304]

C
Ce
302
* 171

Painting the face with »urucu» is rather general here. The custom of painting the face prevails or has prevailed among most tribes in S. America and the red colour of Bixa Orellana (Urucu) is greatly appreciated where it can be had.

The »Genipa» is not used. It is possible that the genipa will not grow as far south as the Chiriguano and the Chané land.

XIV.

Stained Teeth.

It was already related by VIEDMA[1]) that the Chiriguano stain their teeth. 302 I have seen Chiriguano women in the 171 * Caipipendi valley stain their teeth a blackish blue with the leaves of a plant called «tajú». LASCH has made a study of the custom of staining the teeth among S. American Indians. He speaks of this custom from Cumaná, quoting GOMARA, according to which author the women stained their teeth at the death of their husbands.[2]) He further men-[765] tions that this custom prevails among the Miraña,[3]) the Piro,[4]) the Goajiro[5]) and the Arawaks[6]) in Guiana. To this I can, as shown by the map and table below, make several additions.

---

[1]) P. 181.

[2]) I have looked through all available editions of GOMARA in order to find this statement, but in vain. What I have been able to find [114] about stained teeth in GOMARA P. 205—206 I give here.

«Précianse de tener muy negros los dientes, y llaman mujer al que los tiene blancos, como en Curiana ....· Hacen negros los dientes con zumo ó polvo de hojas de árbol, que llaman ahi los cuales ..... a los quince anos, cuando comienzan á levantar la cresta toman estas yerbas en la boca, y traenlas hasta ennegrecer los dientes como el carbon; dura despues la negrura toda la vida.»

[3]) From MARTIUS.

[4]) » RAIMONDI.

[5]) » WAITZ.

[6]) » MARTIUS (1). He writes. T. 1, P. 691, «Schwärzung der Zähne, die GOMARA, Cap. 73. von den alten Cumanesen angiebt soll hier auch vorgekommen sein.» This statement seems so vague, that I have not indicated it on the map. As far as I know it is not confirmed by other authors writing on the same Indians.

Table 9.

The distribution of stained teeth. Map 8.

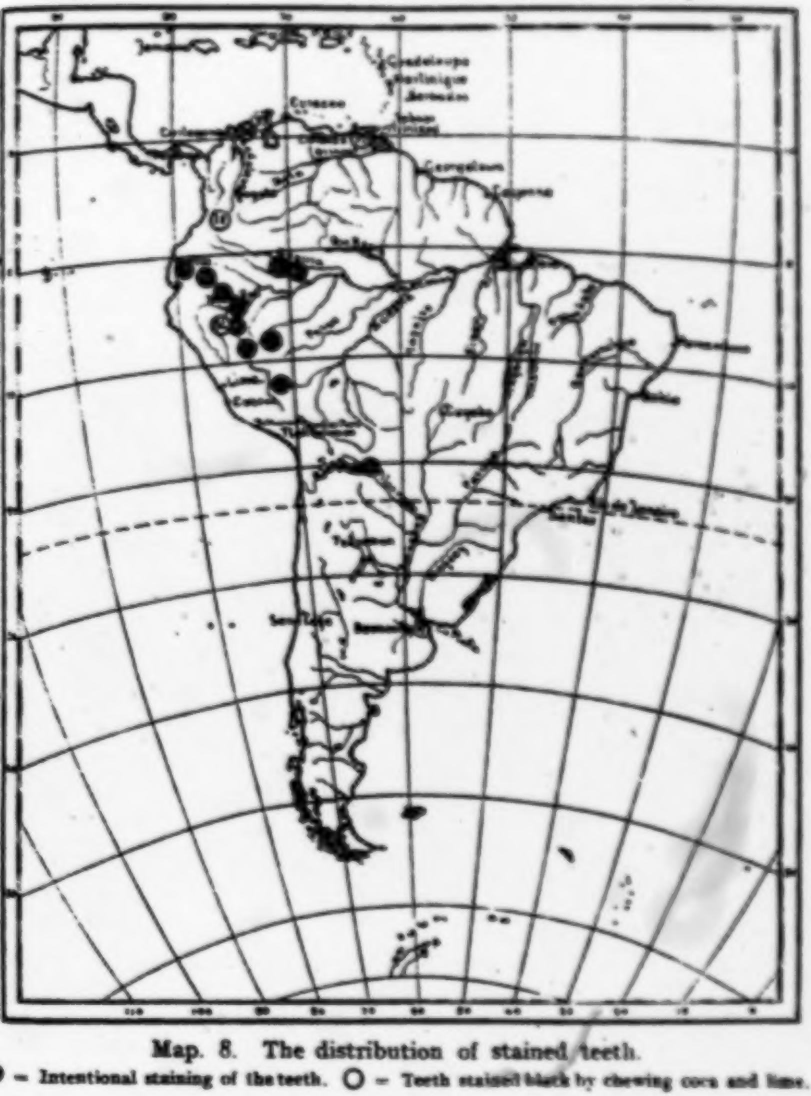
C
382
*171
102
S
102
302

4. Chiriguano, Viedma P. 181. Men and woman.
41. Caxinaua, Capistrano de Abreu P. 459.
51. Indians north of Peru, Poeppig Vol. 2, P. 253. Men.
34. Jivaro, Hermessen P. 440, Men.
36. Ijca, Bolinder (4) P. 114. Men.
39. Goajiro, Waitz Vol. 3, P. 373.
46. Conibo, Raimondi P. 667. See also Castelnau Vol. 4, P. 368.
61. Whiffen P. 88. »Among the Orahone, and also among some of the Iça and Yapurá Indians, the women cover their teeth and their finger-nails with a black pigment. The paint is never allowed to work off entirely, fresh designs being superimposed before the original has quite disappeared.»
70. Piro, Raimondi P. 667. The Piro is also called »Chontaquiro». Chonta = black wood, quiro = tooth.
71. Sipibo, Setebo, Raimondi P. 667; Smyth and Lowe P. 211 write about the Indians in Sarayacu: »but their custom of staining their teeth dark blue, with a plant they call mucumucu, produces a very disgusting effect on their countenance.» The Indians in Sarayacu were Panos, Setebos, Conibos, Shipebos and Sencis.
99. Cumanogoto, Gomara P. 405; Benzoni P. 4, 9. »They make a certain mixture to preserve the teeth, with oyster shells of the sort that produce pearls, burning them with the leaves of the *laxi*, and then adding a little water, so that the mixture looks like the whitest lime; and this they spread over the teeth, which become black as charcoal».

Las Casas V. 63, P. 436. »Vieron ellos tambien, y yo despues que acostumbran los hombres traer en la boca cierta hierba todo el dia mascando, la que, teniendo los dientes blanquisimos comunmente, se

[text continues on p. 88]

C
102
302
*171
S
102
276
302


Guadeloupe
Martinique
Barbados
Curaçao
Georgetown
Cayenne

Map. 8. The distribution of stained teeth.

● = Intentional staining of the teeth. ○ = Teeth stained black by chewing coca and lime.

C 88

342 les ponen una costra en ellos más negra que la más
• 171 negra azabaja que puede ser;» Las Casas speaks of
102 the expedition of Per Alonso Niño y Cristó-
5 bal Guerra 1499.
102
302 Martyr P. 368. «Between the ages of ten to twelve
[9813] years when puberty declares itself, they chew, all day long, leaves of trees, as thick as a nut, taking no other food nor drink. With this substance they blacken their teeth till they are the colour of a dead coal. They contemptuously call the Spaniards women and children, because the latter like to have white teeth; or likewise wild animals, because they let their hair and beards grow. Their teeth last a lifetime and they are ignorant of the aches which sometimes oblige us to have our molars removed. Their teeth never decay». (The Eighth Decade)

Ruiz Blanco P. 58, medicine-men. «dos calabacillas en una traen una yerba tostada que llaman a y o, que mascan y es buena para la dentadura, y en otra una calecilla con que ponen los dientes negros.»

Simon (1) P. 316.

1 c. Prez, Manuel Rodriguez P. 25. «Mascan continuamente, aquella su yerva diabolica, la coca, de que tienen negros como una pez los dientes» . . . .

6 P. Aguaruna, Muro P. 195.

4 S. Miraña, Martius (1) Vol. I, P. 536. Men

9 S. Maynas, Chantre y Herrera P. 63. «Firme la dentadura y por todo igual, cuando no la dañan con el mascar continuo hierbas de zumo negro; es sumamente blanca y la conservan hasta la vejez. Tienen, algunas naciones, por adorno y por moda teñir los dientes y labios de color negro, y á este fin, mascan hierbas y tallos cuyo zumo mezclado con ceniza que meten en la boca, hace, con el beneficio de la saliva, un negro que dura por muchos dias. Mas, no contentos con una tintura, dan á lo menos cada dos dias este barniz

C
302
179
102
5
102
302

á dientes y labios para conservarlos así más lustrosos. Causa grima el ver cómo refriegan los labios con lo más áspero de la hoja del maíz para quitar el tinte antiguo hasta desollarlos, y echar sangre para que de esta manera asiente mejor el nuevo, y brille más por fresco y reciente.»

IX. Colorado, River (3) P. 188.

(70) Manobamba (Yanaximes), Balboa Chap. 8; Sarmiento P. 96. «Conquistó Topa Inga y sus capitanes desta vez cuatro grandes naciones. La primera fué la de los indios llamados Opatarios y la otra llamado Manosuyo y la tercera se dice de los Manarios o Yanaximes que quiere decir los de las bocas negras.» Yana = black, simi = mouth. Near Cuzco, not marked on the map. Possibly identical with Pisa (70).

C
302
576
179

Bolinder, who has observed that the Ijca's teeth are stained black by their chewing coca and lime,[1] has advanced the opinion that the staining of teeth among the Cumanagoto may not have been purposely done, but caused by the lime that was chewed with coca. I believe that Bolinder may be right in this supposition. As early a writer as Ruiz Blanco[2], who lived in many years in Cumaná, considered that the lime chewed with coca was the cause of blackened teeth.

In N. Peru[3], where lime is chewed with coca, the Indians have black teeth. In the rest of Peru, where coca is chewed with the ashes of quinoa-husks and other plants, the Indians' teeth do not get black from coca chewing. This corroborates the assumption of Bolinder that the teeth of the Cumanagoto were blackened by the lime they chew-

---

[1] (4) P. 122.

[2] P. 32.

[3] «Without doubt the lime destroys the teeth and consequently the Peruvian «coqueros» have disgustingly black and carious rows of teeth.» Poeppig Vol. 2, P. 233.

362 / 276 / •171 ed with coca. The teeth of the Paez were also blackened by coca-chewing. Most likely this holds good of the Goajiro too. We ought, therefore, to distinguish between two regions, one where the Indians get black teeth by chewing coca-leaves with lime, and another where they purposely stain their teeth blue or black. The latter must be renewed after a time, the former, which is the result of coca-chewing with lime, lasts for life.

362 / 194 / •171 It is difficult to explain the geographical distribution of the custom of staining the teeth. Perhaps the unintentional staining of the teeth is the original one, and has given rise to the intentional staining. One might suppose that the Indians who saw the «nice» black teeth of the coca-chewers wanted to appropriate the fashion, though they were not coca-chewers themselves, and consequently they stained their teeth dark.

That coca-chewers in Cumaná considered it elegant to have black teeth is obvious from what MARTYR says: «They contemptuously call the Spaniards women and children» because the latter like to have white teeth.» «Women» is not exactly a title of honour among Indians.

One might imagine that staining the teeth was once fashionable within the civilized area of the Andes and that the custom has lived on in the border land after it dropped out of fashion in the place from which it originated. Staining the teeth is not a Guaraní custom, so it must have been only when the Chiriguano Indians reached their present place of abode that they learnt the custom. [177]

It may also be assumed that the coca used to be chewed with lime all over the old civilized western area. If this is so, we ought to be able to prove it archaeologically, but, as far as I know, none of the skulls found in Peru or Bolivia have had teeth blackened and destroyed by using lime with the coca.

It is, however, a striking fact that intentional blackening of the teeth does not occur far from the Andine region of civilisation. This, at any rate, appears from the quotations here given; nor is it likely that blackening of the teeth in early post-Columbian times had a much greater distribution than is here indicated. I venture to affirm this since blackening of the teeth is one of those practices which would strike all travellers even from the time of the Conquest. Respecting such practices as have interested older writers we ought to be able to make very exact maps of their post-Columbian geographical distribution.

302
174
171*

XV.

Ornaments and Knick-knacks.

C Nowadays the Chiriguano and the Chané have but few
Ce personal adornaments. This is perhaps to a certain extent
301 owing to their long intercourse with Whites. Feather-ornaments,
177 pierced teeth, and such things are not seen. I have
C already described the »boivéra». The embellishments on
Ce these silver ornaments, especially the Swastika are, I think,
[531] not genuine Indian. In South America I know of the
*[171] Swastika on pottery from the Mizque valley1), from Tiahuanaco2)
and from Ica3) and Cajamarca4) in Peru. An ornament which most certainly originates from the civilized mountain region is the »topu» or breast-pin, which is peculiar to this region. An embellished one of silver is shown here (fig. 29 a). It was most likely made by a Mestiz smith. Necklaces worn by Chiriguano and Chané women are most often of glass beads, but one now and then sees ornaments of pieces of shells, turquoise and, other green and blue stones, black seeds and coral. The stones are said originally to have been found in the ground, especially in the Tarija valley.

C A very rare ornament is the head-dress depicted here
292 (fig. 28). It was formerly worn by Chiriguano women on
301 festive occasions. Even if it is now made of a material
[177] which the Indians have had from the Whites, it is quite

---

1) Nordenskiöld (11) Fig. 37.
2) Posnansky Fig. 39.
3) Max Schmidt (7) Fig. 34.
4) M. C. A. 176.

5:Nordenskiöld E-5 (1908-1909, 1913) 1920
SF10 Chiriguano SF10

[P. 93]

292
301

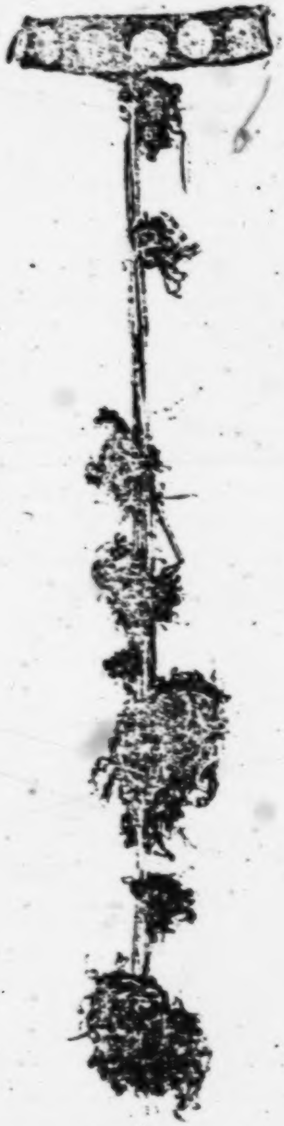


Fig. 28. Head-dress for women. Made of stuff, tufts of yarn and tin. Chiriguano, Caipipendi, R. M. E. 32.

292 possible that the original idea was Indian and in that case
301 came from the civilized mountain region. The frontlet was
177 there a mark of distinction[1]).

177
301
531

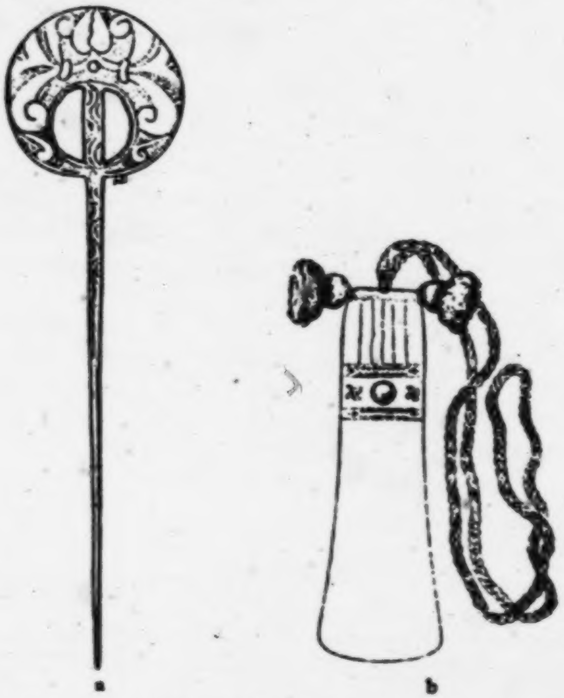


Fig. 29. a. Silver pin used for fastening the »Tipoy«. The shape Indian, embellishment Spanish. Chiriguano, Rio Parapiti. In Mr HERNMARCK's private collection. 1/2.

b. Breast-plate of silver »Boivéra«. Chiriguano, Caipipendi. In my private collection. 1/2.

---

[1]) »Algunas cuñas usan en esta circunstancia ceñir la cabeza con una especie de corona de color rojo, por detras de la cual penden varios cordones que rematan en una borla. Este adorno, de que usan solo algunas y esclusivamente en el arete, no deja de darles cierta gracia.« CORRADO P. 44.

XVI.

Carrying-implements.

In Part I have already mentioned that the Chiriguano and Chané use carrying-nets, and never baskets, when carrying burdens on long journeys, when bringing home the produce of their fields, or when bearing water long distances. The method is for the band of the carrying-net to be fastened around the forehead, the burden resting on the back. If the water is near the village, they often bear the pitcher on their shoulders and, now and then, at the mission-stations, on their heads. In contradistinction to the negroes, however, the Indians are never seen carrying burdens on their heads while on journeys.

C
Ce
482
415

In Part I there is a map (25) showing the geographical distribution of the carrying-net. As has been proved by the excavations of Uhle[1]) at Arica, the carrying net must be a very old culture element in S. America.

C
Ce
[171]*

Calabashes are sometimes put inside a net (fig. 30) in order that they may be carried more easily. A calabash in a net is, of course, easily hung up on a hook in the roof of the hut.

C
Ce
[353]

Earthen vessels are sometimes hung up in the same way. These have then more or less the shape of calabashes. Boman[2]) depicts an earthen vessel hung up in this way from Calama.

In my collection of earthen vessels there is one from the Chiriguano, and another from the Chané, which are intended to be carried by a string running round the vessel

[171]*

---

[1]) (10) P. 12.

[2]) Pl. XXVIII, Fig. 180.

C
Ce
415
482
[171]

through the ears. These are reminiscent of the type of vessel employed by the Choroti and Ashluslay for carrying, and which I have traced to the Incan «aryballes». I did not mention these vessels in Part I, as they are not typical vessels of the Chiriguano and Chané. Among the numerous pitchers used for carrying I have only seen these two specimens. I know nothing of their origin, why they were made, or if they were merely acquired from one of the tribes who always use such vessels for bearing water. The latter is, however, unlikely.

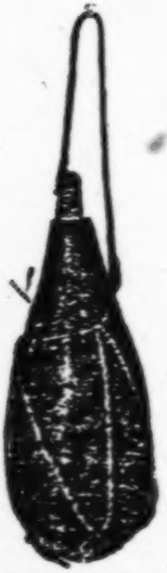


Fig. 30. Calabash in a net with an empty corn-cob as stopper. R. M. E. 522. 1/7

Table 10.

Calabashes put inside a net. c ce

Chiriguano, R. M. E. 522. 415
Chané, R. M. P. 48. 482
Mataco, R. M. M. T. 114; R. M. M. 1101. 171*
Mbayá, Boggiani (2) P. 112, Fig. 50.
Karajá, Krause Pl. 56. 4 b. c.
Cainguá, Outes (5) and Bruch P. 96.
Indians upper Rio Xingú, Steinen (3) P. 141.^
Guayaqui, Kunike Fig. 6.
Ijca, Bolinder (4).
Goijiro, Therese von Bayern (2) Vol. 1, Pl. 1.
Indians Roraima, G. M. 12. 1. 476 (Basket-net.)
Indians Popayan, Uhle (1) Vol. 2, Pl. 4, 1.

^[erratum: this should read p. 241. Cf. errata sheet, p. 245. -Analyst]

XVII.

Rafts.

C 501 As far as I have seen, the Chiriguano now never use canoes or rafts. PEDRO DE SEGURA,[1]) however, mentions rafts from these Indians at the end of the sixteenth century. Nowhere else in the literature have I found any confirmation of their being used by these Indians, so I refrain from giving an account of the distribution of different kinds of rafts among the South-American Indians, and refer my readers to FRIEDERICI'S[2]) excellent work on Indian canoes and rafts. I have found rafts in common use among the Chimáne and other tribes in North Bolivia.

C Ce 491 C 481 The Chiriguano and Chané do not build bridges. The former, at least, are known as exceedingly clever waders.

---

[1]) Carta de PEDRO DE SEGURA. »Corregidor de Tomina, al Virey del Peru, con relacion de la guerra de los Chiriguanaes» SERRANO Y SANZ P. 524.

[2]) (5).

XVIII.

Games.

I have found a greater number of games among the Chiriguano and Chané than are known to any other tribes in S. America. In the first part of this book I pointed out that games of chance were known only in the west of S. America and that the »tsúka» or the »chunquanti» game is one that has come to the Indians in Chaco from the civilized area in the west. I also mentioned having found it among the Chiriguano and Chané. It is not necessary to repeat the description of the game here, as it occurs in Part I of this work.

C
Ce
524
c
ce
[177]

The Chiriguano and Chané have another dice game called »chukareta» which is played with a heap of sticks. These sticks are convex on one side and flat or concave on the other. It is played in the following manner.

First you place a stick (máma) so that it points towards the person who is to throw. We assume it has been placed with the convex side up. If two or more sticks fall crossed with the convex side up and without being touched above by any stick with the flat or concave side up, they go to the throwers. If the máma had been placed with the flat or concave side up, only the sticks with the flat or concave side up would have counted. The players throw alternately and each of them places the máma as he pleases. The one wins who gets most sticks. When only four sticks are

---

1) With the exception of the chunquanti-game I here repeat the description of Chiriguano and Chané games so as to group them in one place, though I have given them before. There are already several descriptions, but as they are only in Swedish they are regarded by many explorers as non-existent.

C
Ce
524 left, no máma is put out and the players decide if the convex or flat (concave) side is to count.

C
Ce
524
177 Other games of chance that are common here have most likely been borrowed from the Whites. »Taba», the well known national game of the Gauchos, is played, the astragalus of a cow being thrown, and it depends on which side of the bone turns up whether you win or lose.

The European game of dice goes by the name of »daro», here from the Spanish »dado». The Chiriguano and Chané have dice of their own make. They are made of bone or burnt clay. In Tihüipa I wrote down the rules of this

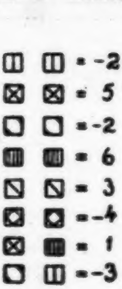


Fig. 31. Rules for the game of »daro». Chiriguano. Tihüipa.

game shown in Fig. 31. All other combinations are = 0. The first to get ten marks, has won. The marks are made on the ground. It is plain that these dice are an imitation of European dice. Those at the top of the illustration correspond to our one, the next to our five; then comes two, then six, then three and next four. They seem to have made their own rules for this game or else they are a re-hash of those of the Whites. There is no doubt that card playing has come from the Whites. The cards they use are bought in stores.

C
Ce
526 Of the games of skill occurring here I have in the first part of this book described in detail a bat and ball game (map 28) and a game with maize leaf balls (map 29).

The bat and ball game »táca» (a kind of hockey), is played by the Chiriguano boys. I have not seen this game among the Chané. We also saw in Part I that the game is played by many tribes in the Chaco and by the Araucanians. Besides playing with long, bent sticks the Chiriguano also play with a kind of racket The balls are always of wood. I have not seen rackets elsewhere. In part I we saw that the game with maize leaf balls is especially met with in the northeastern part of S. America.

C
Ce
526
C
[857]

We find a most interesting ball game among the Chané which is not known by the Choroti and Ashluslay. It is played with india-rubber balls (Map 9). All the way from the Chané in El Gran Chaco to the West Indies and Mexico the game is characterized by the players not being allowed to touch the ball with their hands but having to catch and butt it with their heads, shoulders, hips or feet. In the Journal of the Royal Danish Geographical Society I have given an account of the distribution in South America of games with india-rubber balls. I here repeat in part what I wrote there, as the Danish language is not likely to be known any better than the Swedish. I can also add something to what I wrote there.

Ce
526
171*

As the conformity of the rules of the game all the way from Mexico to the Chané is of the greatest anthropogeographical interest, I reproduce many of them here word for word as given by several authors. The game is mentioned from the Chané in Litterae Annuae of 1605. The author of this description says of these Indians that they played at ball using their heads instead of bats, and that they were quite as clever as the Spaniards were with their hands and bats.1)

This game »tóki» is still played by the Chané at Rio Parapiti, where I have seen boys playing at ball with their heads.

Ce
526
[857]

---

1) Page 409. »Indos videlicet huius Prouinciae, pilae ludo capitibus tabellarum loco, tanta dexteritate exerceri, quanta Hispani, manibus, atque tabellis.»

Ce 526 heads. The game is mentioned in one of the Chané-Indian tales, published in my book »Indianlif». From this tale Ce 526 539 we see how difficult it used to be for the Chané to get india-rubber for their balls. It had to be fetched from the north, as there are no rubber-yielding trees at Rio Parapiti.

»Aguaratunpa» (the Fox[1])-demon) had captured »Ururutti», the white Condor, who offers everything imaginable to get back his liberty.

»I will fill a house with bowls of silver »Cagua» and give it you, if you will release me,» says the white Condor.

»I have all the silver I want», Aguaratunpa answers, »and I capture you in order to kill you. But if you can get me the white india-rubber ball »toki» to play with, I will release you», says Aguaratunpa.

Ururutti now flies and fetches the white india-rubber ball. Then Aguararatunpa and the others play the game, catching and butting the ball with their heads. The white Condor, however, catches the ball and flies off with it and so Aguaratunpa sends another bird »Tavatan» to fetch the black india-rubber ball.[2])

C Ce 526 *171 The game is mentioned from the Itatines east of Sta. Cruz de la Sierra in Litterae Annuae of 1589. The ball was made of the resin from a certain kind of tree and yet it was so light that it bounced at the slightest touch more easily than any leather ball. They did not, however, strike this ball with their hands or feet, but with their heads and, if need were, with their elbows, giving and taking it with the utmost skill. The winner was awarded a great prize.[3])

---

[1]) NORDENSKIÖLD. (8) P. 244.

[2]) The two india-rubber balls from the Cavina-Indians in the Gothenburg museum are of a greyish-yellow; the one from the Huari-Indians is a blackish-brown.

[3]) Page 434. »Pila est e cuiusdam resina arboris compacta, leuis tamen, et quæ minimo pulsu magis resiliat, quam folliculus quicumque: eam porro non manu impellunt, aut pede, ſed capite, et, si forte, cubito, mira dantium accipientiumque dexteritate: et est magnum victori praemium.»

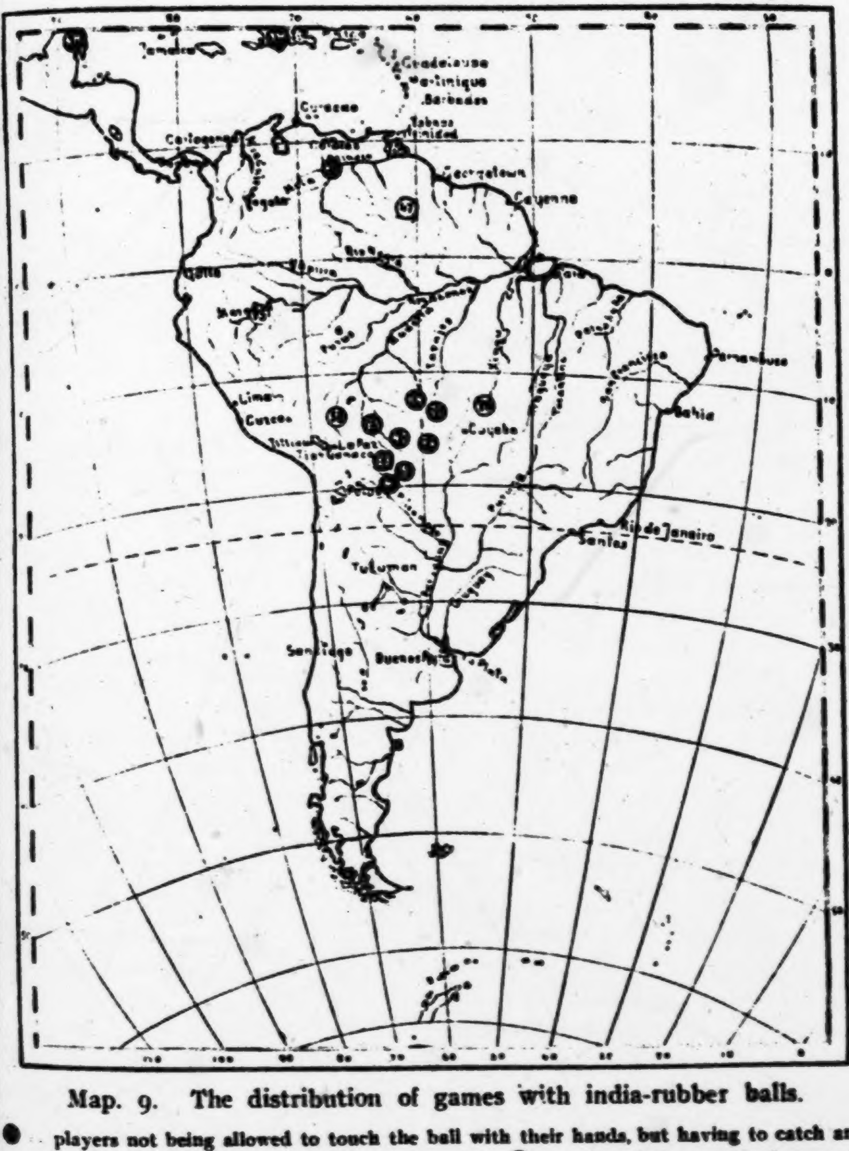
5tNordenskiöld E-5 (1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8
South American Indians 53

103

C
Ce

102
526
171*

S
102
171
526


Jamaica
Guadeloupe
Martinique
Barbados
Curaçao
Tobago
Trinidad
Cartagena
Bogotá
Georgetown
Cayenne
Quito
Manaos
Pernambuco
Lima
Cuzco
La Paz
Cuyaba
Bahia
Rio de Janeiro
Santos
Tucuman
Santiago
Buenos Aires

Map. 9. The distribution of games with india-rubber balls.

● = players not being allowed to touch the ball with their hands, but having to catch and butt it with their heads, shoulders, hips or feet. ○ = rules of the game unknown.

4 = Chiriguano; 5 = Chané; 20 = Paressi-Kabisi; 23 = Churápa; 25 = Mojo; 28 = Auetö; 40 = Itatines (Guarayú); 47 = Indians, British Guiana; 58 = Cavina; 64 = Huari; 88 = Otomaco; 94 = Chiquitos; 3M = Indians, Haiti; 4M = Indians, Yucatan; 98 Maynas.

5:Nordenskiöld E-5 (1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8
Chiquito SF9

C 526 I have not seen the Chiriguano play this game. I have, however, heard that they used to play it and called the game »bondi». The ball, which was of solid india-rubber, might not be touched with the hands but had to be caught and struck with the head. It might not touch the ground.

Co 526 Both earlier and later authors mention games with india-rubber balls among the Chiquito Indians in south Bolivia.[1] These Indians hit the ball with their heads. At Rio Guaporé I saw rubber-workers, who spoke Chiquito, playing this game. They were very clever at striking the ball with their heads. Even low balls that only just cleared the ground, were caught in the same way, the players throwing themselves on their faces. They danced while playing. This game is also known to the Churápa, a Chiquito-Indian tribe, near Sta. Cruz de la Sierra, who called it »taurosh».[2] **Eder** speaks of games with india-rubber balls in Mojos.[3] The ball was kicked or caught and butted with the head. The balls that were used were either solid and heavy or light and hollow.

C Ce 526 *171 I saw the small tribe of Huari Indians[4] near the Upper Rio Guaporé playing with hollow india-rubber balls. There also the balls had to be caught and butted with the head.

When **Roosevelt** on his celebrated journey through Matto Grosso came to the Paressi Indians, he was astonished to see them play »football with their heads», a mode

---

[1] **Fernandez.** »Juntanse muchos en la plaza con buen orden, echan al ayre una pelota, y luego, no con los manos, sino con la cabeza, la rebaten con maravillosa destreza, arrojandose aún en tierra para cogerla». **d'Orbigny** (2) Partie Historique, Tome 2. P. 394—395; **Nordenskiöld** (8) P. 180.

[2] **Nordenskiöld** (9) P. 28.

[3] P. 341.

[4] **Nordenskiöld** (11) P. 387. A ball that I brought home from these Indians is about 6 cm. in diameter. The rubber is unusually thick, about 6—7 mm. It is blackish brown.

C
Ce
526
171*

of playing that he thought was as yet undescribed.[1]) They used a light, hollow rubber ball of their own make. It was round, and about 8 inches in diameter.

Before Roosevelt[2]) Max Schmidt[3]) speaks about this game in Matto Grosse among the Paressi-Kabiši. There they played with india-rubber balls made of the milky juice from the mangave. The ball might not be touched with the hands during the game, but had to be caught and butted with the forehead, even if it was on the ground. To make this possible a mound of sand might be made under the ball. The balls are 9—11 cm. in diameter. Max Schmidt gives us a splendid photograph of some Paressi-Kabiši lads amusing themselves with this strange ball-game.

Karl von den Steinen mentions india-rubber balls among the Auetö-Indians at Rio Xingú,[4]) but without

---

[1]) Roosevelt, P. 185—86. »The game is not only native to them, but I have never heard or read of its being played by any other tribe or people.»

[2]) Page 185. »The players are divided into two sides, and stationed much as in Association football, and the ball is placed on the ground to be put in play as in football. Then a player runs forward, throws himself flat on the ground, and butts the ball towards the opposite side This first butt, when the ball is on the ground never lifts it much and it rolls and bounds towards the opponents. One or two of the latter run toward it one throws himself flat on his face and butts the ball back. Usually this but lifts it, and it flies back in a curve well up in the air; and an opposite player, rushing toward it, catches it on his head with such a swing of his brawny neck, and such precision and address that the ball bounds back through the air as a football soars after a drop-kick. If the ball flies off to one side or the other it is brought back, and again put in play. Often it will be sent to and from a dozen times, from head to head, until finally it rises with such a sweep that it passes far over the heads of the opposite players and descends behind them. Then shrill rolling cries of good-humoured triumph arise from the victors; and the game instantly begins again with fresh zest.»

[3]) Schmidt, Max (4) P. 181—83.

[4]) Steinen, (3) P. 329.

C
Ce
526
*171

giving the rules of the game. I saw the Cavina-Indians at Rio Beni use india-rubber balls. They were hollow and the rubber was thin and there was shot inside them so that they could be used as rattles. I only saw them thrown with the hands. Indian boys in the Mainas mission[1]) at Rio Marañon also had india-rubber balls of their own making. BARRERE mentions balls of the kind from Amazonas without saying how they were used.[2]) IM THURN[3]) speaks of these balls in British Guiana.

GUMILLA[4]) tells us that the Otomaco-Indians at the Orinoco river played with balls made of a kind of juice that they called »caucho» and which bounced to a man's height at the slightest touch. The ball might only be caught and hit with the right shoulder. If it touched any other part of the body the player lost one point. In this way the balls were butted from shoulder to shoulder up to 10 or 12 times without touching the ground. It struck GUMILLA as stranger still that when the ball was rolling on the ground they could put it in play again by throwing themselves on their faces and pressing their bodies to the ground.[5])

---

[1]) [MARONI] (Jumiò 1889) P. 329.

[2]) BARRERE, P. 139.

[3]) P. 326.

[4]) GUMILLA. T. I, P. 190—191. »Lo singular es, assi la pelota, como el modo de jugarla: la pelota es grande, como una bola de jugar el Mayo, formado de una resina, que llaman CAUCHO, que à leve impulso rebota tan alto, como la estatura de un hombre: el saque, y rechazo ha de ser con solo el hombro derecho, y si toca la pelota en qualquiera otra parte del cuerpo pierde una raya: causa maravilla vèr ir, y venir rechazar y rebolver la pelota diez, doce y mas veces, sin dexarla tocar en el suelo. Es otra cosa de mayor admiracion, al venir una pelota arrastrando, vèr arrojarse aquel Indio contra ella con todo el cuerpo: al modo con que suelen arrojarse al agua para nadar, del mismo modo dàn con todo el cuerpo contra el suelo, y con el hombro levantan por essos ayres otra vez la pelota.

[5]) See GILIJ T. 2, P. 269—272. GILIJ describes the game in detail. He says that the Otomacos had a place set apart for ball-games.

ENordenskiöld E-5/1 (1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8

OVIEDO[1]) gives a detailed description of the game. He tells how there were special play-grounds in the Haiti villages where they played at ball. During the game

C
Ce
526
171*

---

1) OVIEDO. T. 1, Lib. 6, Chap. 2, P. 165.

«E las pelotas son de unas rayçes de árboles é de hiervas é çumos é mezcla de cosas, que toda junta esta mixtura paresçe algo çerapez negra. Juntas estas y otras materias, cuéçenlo todo é haçen una pasta; é redondéanla e haçen la pelota, tamaña como una de las de viento en España, é mayores é menores: la qual mixtura haçe una tez negra, é no se pega á las manos; é despues que está enxuta tórnase algo espongiosa, no por que tenga agujero ni vacuo alguno, como la esponja, pero alijeresçese, y es como fofa y algo pesada.

Estas pelotas saltan mucho mas que las de viento sin comparaçion, porque de solo soltalla de la mano en tierra, suben mucho mas para arriba, é dan un salto é otro é otro y muchos, disminuyendo en el saltar por sí mismas, como lo haçen las pelotas de viento é muy mejor. Mas como son maçiças, son algo pesadas; é si les diessen con la mano abierta ó con el puño çerrado, en pocos golpes abririan la mano ó la desconçertarian. Y á esta causa le dan con el hombro y con el cobdo y con la cabeça, y con la cadera lo mas continuo ó con la rodilla; y con tanta presteza y soltura, que es mucho de ver su agilidad, porque aunque vaya la pelota quassi á par del suelo, se arrojan de tal manera desde tres ó quatro passos apartados, tendidos en el ayre, y le dan con la cadera para la rechaçar. Y de qualquier bote ó manera que la pelota vaya en el ayre (é no rastrando), es bien tocada; porque ellos no tienen por mala ninguna pelota (ó mal jugada), porque haya dado dos, ni tres, ni muchos saltos, con tanto que al herir, le dan en el ayre. No haçen chaças, sino pónense tantos á un cabo como á otro, partido el terreno ó compás del juego, y los de acullá la sueltan ó sirven una vez, echándola en el ayre, esperando que le toque primero qualquiera de los contrarios; y en dándole aquel, luego subçede el que antes puede de los unos ó de los otros, y no çessan con toda la diligençia possible á ellos, para herir la pelota. Y la contençion es que los deste cabo la hagan passar del otro puesto adelante de los contrarios, ó aquellos la passen de los límites ó puesto destos otros; y no çessan hasta que la pelota va rastrando, que ya por no aver seydo el jugador á tiempo, ó no haçe bote, ó está tan lexos que no la alcança, é ella se muere ó se para de por sí. Y este vençimiento se cuenta por una raya, é tornan á servir para otra los que fueron servidos en la passada, é á tantas rayas, quantas primero se acordaron en la postura, vá el presçio que entre las partes se conçierta».

HERRERAS description is not so detailed. Dec. 1, Libro 3, Chap. 4.

C
Ce
526
*171

the chiefs sat on beautifully carved seats or so called »duhu». OVIEDO's description makes it quite clear that they used india-rubber balls. Trees yielding india-rubber, however, seem to be unknown in Haiti, so perhaps the Indians got them while trading with the tribes on the South American Continent.

OVIEDO says how well these balls bounced. If one is but dropped on the ground it bounces higher than a ball of feathers would, and it keeps on bouncing again and again. They played in the same way in Haiti as they did at the Orinoco, not throwing the balls with their hands but catching and striking them with their shoulders, elbows, heads, hips or knees. The balls were solid.

I have shown on map 9 the distribution of rubber balls in South-America. In most places it is, as we have seen, played in such wise that the balls are not allowed to be touched with the hands, but have to be caught and struck with some other part of the body. Judging by the distribution of the game I should not consider it unlikely that it has been spread in South America by the Arawaks. The Indians in Haiti were Arawaks, as also the Paressi-Kabiši and Chané. The Otomaco had Arawakan civilization. It is interesting to learn from the Chané tale that the balls were brought from a distance. It is possible that the same thing was done in Haiti.

As early a writer as GUMILLA states that a ball-game like the one he describes from the Otomaco-Indians, was played in Mexico. Thus he quotes P. ROXAS (Historia Cinaloá, lib. 8, cap. fol. 475.) who mentions similar games among the Acaxees-Indians in Sierra de Topia.[1] There is

---

[1] T. 1, P. 191. The publisher of EDER's work also had his attention drawn to the similarity between the ball-games in Mexico and in Mojos. (P. 344).

»Eandem frequentabant olim veteres Mexicani, et Clavigero teste hodiedum exercent Taumarenses. Insulae S. Dominici incolae se se hoc eodem ludo jam olim oblectarunt, testante Oviedo, at pilam verum va-

a striking similarity between »tlaxtli«, the Mexican ball game, and the one which is played in the West Indies and South America when you take into consideration the different standard of civilization of these peoples. You cannot expect to get the same elaborate rules of a game from a tribe of low culture as from one of a much higher standard. The balls used for tlaxtli were of india-rubber. In Mexico too they played in such wise that the ball was not touched with the hand but with the hip.[1] The same game was also played by the Maya.[2]

C
Ce
526
171*

One sometimes sees Chané and Chiriguano women playing a game like nine-pins which is called »tarapia« by the former and »tocoróre« by the latter. They played it as follows at Tihitipa. Two rows of maize grains were laid out, two grains on each other like miniature nine-pins at a distance of 4 or 5 feet. Two persons took turns in playing, trying to knock down each others maize nine-pins with a stone ball. The one who first knocked down all the other players nine-pins won the game.

C
Ce
526

At Rio Parapiti the players had three nine-pins each. There was a distance of one fathom between the ninepins of the two players. Every nine-pin consisted of an empty maize cob and the distance between them was the span of a hand. (the greater[3]). They used a ball of burnt clay, hollow, with small rattling marbles inside.

I saw a quoits-game »parama« played by the Chiriguano at Caipipendi. It is a game for two. A button or something of the kind is put on a stone as a target and the play-

C
524

---

rerum permixtione conficerent. Quis diceret, [illegible] hoc tanta nationum, tot per regiones sparsarum, in eo non [illegible] aliquo [illegible], conspiratio.»

[1] Joyce (a). P. 316. »The players were special gamblers but the most esteemed variety of the game was that in which they were not allowed the use of their hands at all, but struck the ball with their hips.»

[2] Joyce (a) P. 302.

[3] The maximum distance between the thumb and little finger.

C 524 ers throw round pieces of potsherd or flat round stones at it. The button has to be knocked down and the one who has got nearest to it wins a point. The game goes on till one of the players has five or more points according to agreement.

C8 524 »[illegible]« is another game that I have seen Chané boys play at Rio Parapiti. It is played by two boys with maize-cob arrow-darts (Fig. 33).¹ First one boy throws his dart into the ground and then the other, who tries to get as near it as possible. If he gets within the span of a hand (the greatest) or nearer still to his opponent's arrow he wins a point, and a mark is made on the ground. He is the winner, who first has six marks while the other player has none. In reckoning the points only those count which one player has above the other.

»[illegible]« is a game that is only played by small Chané boys at Rio Parapiti. It is played by two boys with a stick apiece. (Fig. 34).² One of them throws his stick so that the point strikes the ground and rebounds as far as possible. Then the other boy throws. The one who has thrown farthest gets a point. He wins who first has eight points while the other has none, that is to say, he must have eight points more than the other boy.

C 526 »[illegible]« is a game for boys which I have seen played by the Chiriguano in Yacuiba at Rio Pilcomayo. The boys form two sides 1, 2, 3, 4 and 5, 6, 7, 8. No. 4, let us say, begins by throwing a discus made of a flat cactus from which the spikes have been removed. The discus is hurled with great speed. The opposing team tries to hit it with their arrows. If this happens No. 4 has to walk out and have a shot at the discus which has been placed in a furrow with its edges facing the shooter. If he hits it he may return with his arrow. If he misses he forfeits his arrow and No. 3 succeeds him. No. 2 comes in if No. 3 misses, and No. 1 in the same way. Should he miss too, then 5, 6 etc. shoot till one of them hits the mark. The arrows

¹[i.e., Fig. 33 - Ed.] ²[i.e., Fig. 34 - Ed.]

that have not hit the mark are out of the game. If one hits the discus thrown by No. 4, it has to be thrown by No. 3 and then in the turn of 4, 3 etc. to try and hit it. The player who loses all his arrows is out of the game. The last one who has any arrows left has won, or rather his side. The arrows used for this game are decorated in order that each player may know his own. C 526

Thus we find two games of chance¹) and eight games of skill among the Chané and Chiriguano. Nothing like this number of games is known from any other Indians in South America. The following table shows us their distribution within the territory that I have explored. C C.C. 529 526 17:*

Table 11.

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ashluslay	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Atsahuaca	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Aymará	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Cavina	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Chacobo	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Chama	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Chané	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Chimane	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Chiriguano	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Choroti	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Churápa	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Guarayo (Itatines)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Guarayo Pauserna	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Huanyam	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Itene	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Itonama	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mataco	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Quichua	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Toba	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Yuracare	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

---

¹) In the sixteenth century.

²) See [illegible] ([illegible])

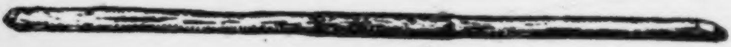
C
C4
524
* 171

In no other tribe among whom I have travelled have I found any quite original game unknown to the Chiriguano or Chané. Very few are known from other parts of South America.

C
64
524
*171
177

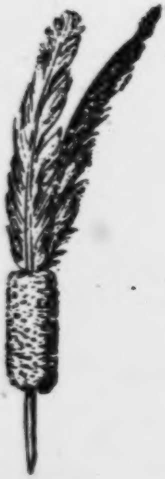
I have already said that games of chance must have come to the Chiriguano and Chané from the civilized area of the west. Games with maize-leaf balls and india-rubber balls are northern culture-elements. Bat and ball games are southern culture-elements. Quoits-games most likely hail from the civilized parts of the west. I found discs that may have been used for such games at Caipipendi and also in the old settlements in the San Fransisco valley in the province of Jujuy in Argentine. Quoits-games are common among the Quichua. — I cannot tell where the Indians here dealt with learned to play with marbles, or to play »sipépe« and »[illegible]« — I have found nothing about such games in the literature. The game of »siuki« may possibly be a northern culture element. Hand-darts like those used by the Chané are mentioned by KOCH-GRÜNBERG from southern Guiana. In BOLINDER's collection in the Gothenberg museum there is a hand-dart of the kind from the Chimila in Colombia.

The reason why we find such a number of games among the Chiriguano and Chané is that the latter tribe is an Arawak tribe and that they have been strongly influenced by western civilisation. They know not only the Arawak games, but several games that were of importance in the civilized parts of the west.



524

Fig. 32. Stick for »the huirahuahua»-game. Chané, Rio Parapiti. R. M. 1/3



[237
824]

Fig. 33. Hand-dart of an empty maize-cob, a stick and feathers. Chané, Rio Parapiti. R. M. 1/3

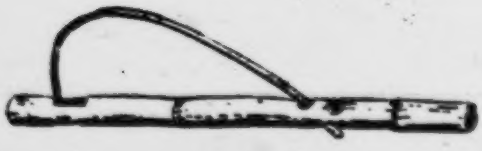


Fig. 34. »Rifle, Chané, Rio Parapiti. R. M. E. 160. 1/8

XIX.

Playthings.

C
Ce
524 I will now pass on to speak of the playthings of the Chiriguano and Chané children, leaving out such as are merely imitations of things used by the elders. They include dolls, buzz-discs, hoops and whips, humming-tops, »bullroarers«, and »rifles«.

C
Ce
524
*171 I have collected dolls from the following tribes: — Chiriguano, (clay), Chané (wax, cloth, clay), Choroti (unburnt clay, bone), Toba (ditto), Tapiete (unburnt clay,) Mataco (unburnt clay,) Yuracáre (wax), Chimáne (wood), Guarayú-Mission (wood or cloth).

Except among the Chiriguano[1]) and Chané[2]) I have only seen the humming-top among the Quichua[3]) and the Chimáne[4]). KOCH-GRÜNBERG[5]) mentions it from N. W. Brazil and from the Roraima-Indians[6]) and Krause[7]) from the Karajá. At present I deem it impossible to say whether we have here a genuinely Indian culture-element or not.

The same is true of the buzz-disc. Its distribution may be seen from the table 12 which I only publish in order to arouse interest in these apparently insignificant objects. It is necessarily very incomplete.

It is doubtful whether the »rifle« (Fig. 34) is genuinely Indian.

---

[1]) R. M. K. 338.
[2]) R. M. P. 64.
[3]) R. M. 03. 16. 259.
[4]) G. M. 15. I. 937.
[5]) (2) Vol. 1. P. 121.
[6]) (3) P. 78.
[7]) Fig. 173. P. 311.

C
Ce
524
171*

Excepting the Chané I only know of hoops from the Huari. What I have seen of »bull-roarers» I have already mentioned in Part I. S. American Indian play-things are altogether too little known for us to draw anthropogeographical conclusions concerning their distribution.

Table 12.

Distribution of the buzz-disc.

Chiriguano, R. M. E. 463.
Chané, R. M. P. 180.
Karajá, Krause P. 311, Fig. 176.
Yuracáre, R. M. Y. 65.
Indians Roraima, Macusi, Wapisiana etc. Koch-Grünberg (3) P. 80.
Cavina, G. M. 15. 1. 1453.
Itonama, G. M. 15. 1. 1266.

XX.

Musical instruments.

C
CE
534 The Chiriguano and Chané have the following musical instruments: drums, flutes, whistles, and trumpets. Among the latter tribe I have also seen the panpipe and the musical bow. The panpipe may possibly occur among the Chiriguano too.

I have already, in Part I, dealt with the drum, the whistles, and the musical bow. The two former, I concluded, were Peruvian, the latter a post-Columbian culture-element.

C
CE
[177] When studying Indian musical instruments we must bear in mind that, in post-Columbian times, they have learnt a good deal from Whites and negroes.

C
CE
[197]
[212] At the mission stations the Indians are always instructed by the missionaries in music. At the Bolivian mission-stations it is not unusual to come across Indians who very well understand musical notation, though unable to read or write. At the Chiriguano mission stations there are full-blown musical bands.

C
[192] A large drum is called by the Chiriguano »angúahuasi«, a ordinary drum »angúa« or »angúarai«. Like the Guarani Indians in Paraguay the Chiriguano call a mortar »angúa«. The Mataco sometimes make drums by stretching a skin over a wooden mortar. So too, if we are to be guided by the name, the Chiriguano drums must originally have appeared.

The long wooden-whistle (fig. 35 *A*) is very common among the Chiriguano and Chané, and often of great size; the round wooden whistle is more rare. Both are often elaborately carved.

StNordenskiöld E-5,4 (1908-1909. 1913) 1920
SF10 Chiriguano SF10
Chane SF8

C
534
531

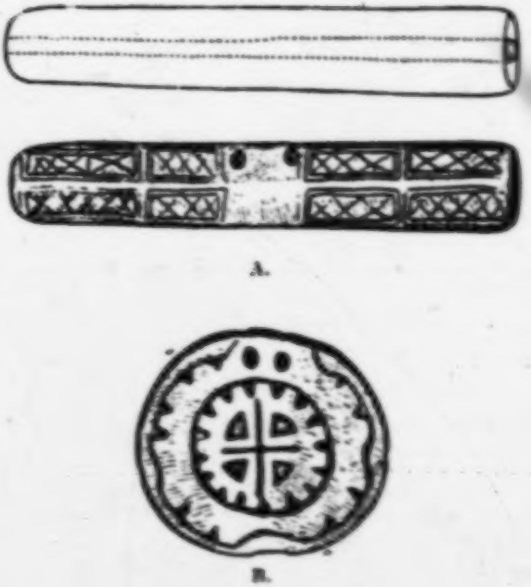


Fig. 35. Wooden whistles.
A. Chiriguano, G. M. 13. I. 545. $^{1}/_{2}$. B. Chiriguano. In private collection. $^{1}/_{2}$

C
Ce
534
531

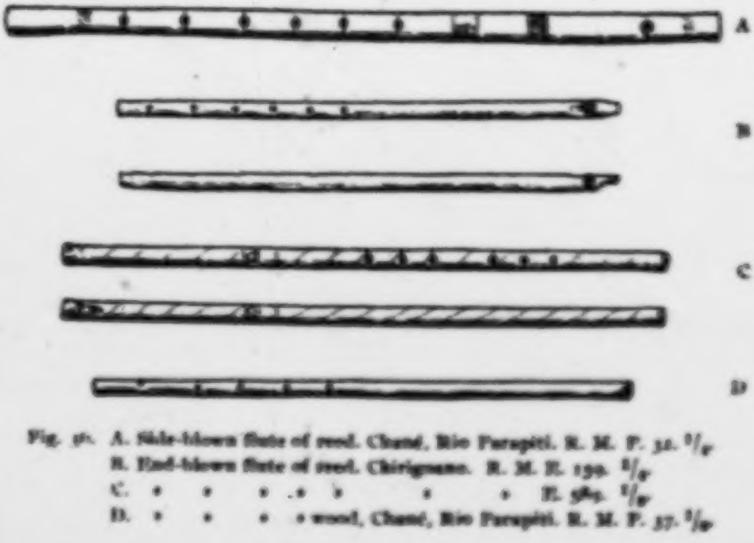


Fig. 36. A. Side-blown flute of reed. Chané, Rio Parapiti. R. M. P. 32. $^{1}/_{2}$
B. End-blown flute of reed. Chiriguano. R. M. E. 130. $^{1}/_{2}$
C. » » » » » » F. 589. $^{1}/_{2}$
D. » » » » wood, Chané, Rio Parapiti. R. M. P. 37. $^{1}/_{2}$

C
ce
534
237

Flutes of several kinds are found among the Chiriguano and Chané, and they are here depicted. They are always made of reeds and never of bone (fig. 36).

C
ce
534
.177
*171

Some of the Chiriguano and Chané flutes are not genuinely Indian. This is evidently the case with side-blown flutes with six carefully fitted holes. The like are not found among outlying tribes, nor, what is very important, have they been found in old excavations on the coast of Peru. No such flute is found among the 26 flutes depicted by Mead from the coast of Peru. Nor are flutes of this kind found among the Choroti and Ashluslay. All the old Peruvian flutes are blown from the end, and the holes seem to be placed very arbitrarily. I have in my collections side-blown flutes from the Yuracáre, Chimáne, Itonama, Cavina, and Tapiete as well as from the Chiriguano and Chané. They are also found among the Cainguá. Everywhere they have six holes.[1]) They are never found among absolutely outlying tribes. Endblown flutes are undoubtedly pre-Columbian. All the flutes from the Peruvian coast described by Mead are end-blown flutes. Three of them are made of reed, one of a calabash, the others of bone. Various kinds of end-blown flutes are very widely distributed in S. America. I have such flutes from the Chiriguano, Chané, Mataco, Toba, Tapiete, Ashluslay, Choroti. Yuracáre, and Huari.

---

[1]) A flute of this kind is called by the Chané »kéna». Speaking of the Quichua musical instruments Cobo says (IV. P. 228) »Quena — quena es una caña sola como flauta para cantos endechas.» The Cavina call a dance at which they play with flutes and drums »kena-kena». (Nordenskiöld (11) P. 460.) Chervin, when mentioning the Quichua musical instruments, says that they, and especially the mestizoes, have their small flutes which they call »quena»... (P. 178). I presume that the Chané took over from the mestizoes not only the side-blown flute but also its name »quena» which the latter in their turn had obtained from the Quichua language. How the Quichua came to apply the word »quena» to a musical instrument which was originally unknown to them, I do not know.

C
As I said in Part I the flutes in different parts of S. America are too little known for me to venture to express any opinion as to the source whence the Chiriguano and Chané got the end-blown flute. Ce 534 171* 177

Both the Chiriguano and Chané possess trumpets made of cowhorn. From the former I also have an old trumpet made from a calabash (Fig. 37 B) which I acquired at Caipipendi. I do not know whether this was ever provided with a mouthpiece. The Chané Indians have on their cowhorns mouthpieces of reed with lips (See Fig. 50. Part I). I have not seen these mouthpieces among the Chiriguano; they blow the cowhorns from the end without a mouthpiece. Most likely the Indians learned from the Whites to use mouthpieces of the aforementioned type. C Ce 534 [237]

Trumpets are very wide-spread in S. America, and it is interesting to notice the distribution of trumpets blown from the side and those blown from the end. The pre-Columbian date of the latter is certain, while that of the former is very doubtful. Map 10 indicates the distribution of these two types of trumpet. C Ce 534 171*

Thus we see that side-blown trumpets occur especially in the basin of the Amazon,[1] in the region where negro influence has been and is very great, and I do not think it impossible that the Indians have learnt to use such trumpets from the negroes. When negro slaves were brought to S. America, they naturally introduced many African ideas. Runaway slaves frequently sought refuge among the Indians. In Matto Grosso, for instance, it is probable that negroes had been in touch with Indians who had not yet seen Whites. From them the Indians would be able to learn a good deal.

When making a trumpet of an antelope horn or the tusk of an elephant, it is quite natural to make a hole in the

[text continues on p. 122]

---

[1] From civilized Indians at Tupiza in Bolivia Chervin mentions side-blown trumpets which, it is quite certain, were introduced by the Whites at a late date.

Bush Negroes SR8

C
534
237
531
B
534

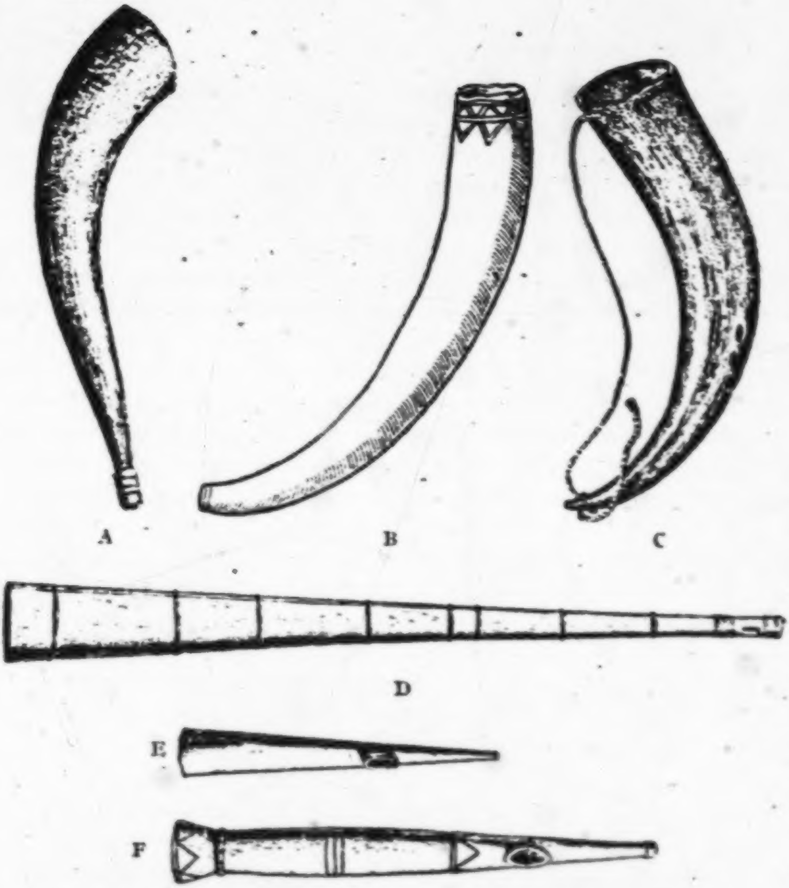


Fig. 37. A. End-blown trumpet made of cowhorn. Chiriguano. R. M. E. 97. 1/8.
B. End-blown-trumpet made from a calabash. Chiriguano. R. M. E. 531. 1/8
C. Side-blown trumpet made of cowhorn. British Guiana. Collection of LILJEWALCH—THULIN. G. M. 12. 1. 50. 1/8.
D. Side-blown trumpet made of wood. Parentintin(?), Brazil. R. M.
E. Side-blown trumpet made of tin-plate. Bush-negroes. Surinam. Collection of BARON KLINCKOWSTRÖM. R. M. K. 204. 1/8
F. Side-blown trumpet made of wood. Bushnegroes. Surinam. Collection of KLINCKOWSTRÖM. R. M. K. 69. 1/8

5:Nordenskiöld E-5,4 (1908-1909, 1913) 1920

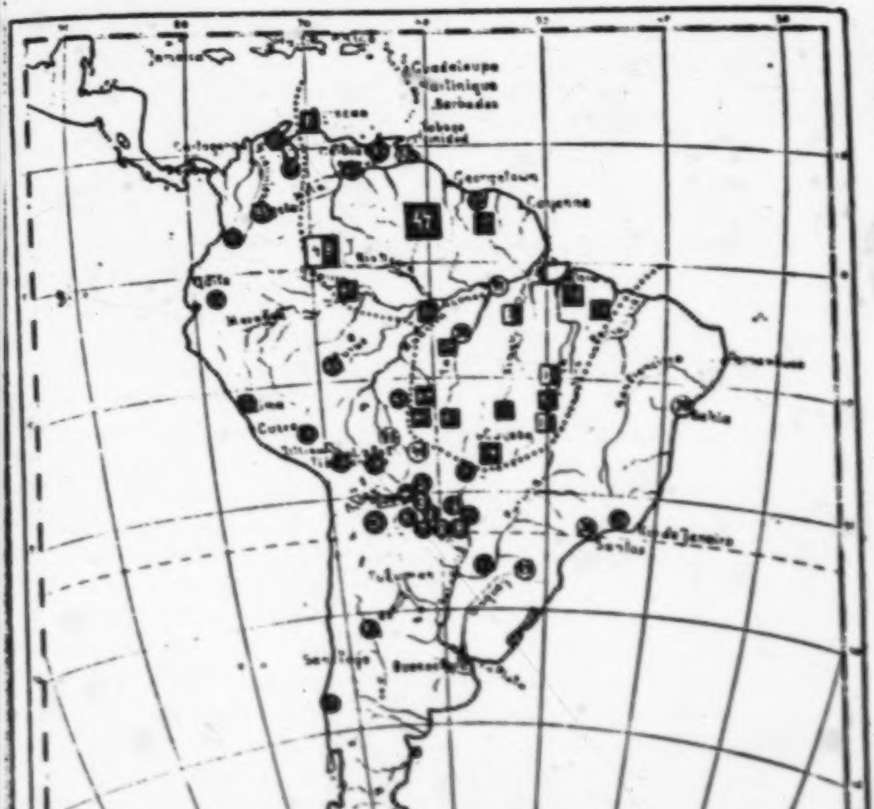
SF10 Chiriguano SF10

Chane SF8

South American Indians 53

C
Ce
102
534
171*

S
102
171
534


Jamaica
Guadeloupe
Martinique
Barbados
Caracas
Tobago
Trinidad
Cartagena
Georgetown
Cayenne
47
48
Rio Negro
Quito
Marañon
Pernambuco
Bahia
Lima
Cuzco
Cuyaba
Rio de Janeiro
Santos
Tucuman
Santiago
Buenos Aires

Map. 10. The distribution of the trumpet.

● – End-blown trumpets. ■ – Side-blown trumpets. ——— = S. and W. distribution of side-blown trumpets. ◧ – Both end-blown and side-blown trumpets occur. ○ – Trumpets occur or have occurred but I do not know whether they were end-blown or side-blown.

StNordenskiöld E-5,4(1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8
South American Indians 53

C
C2
534
*171

side of the horn or tusk, as the point is not hollow; the same holds good, though to a less extent, of a cowhorn. It is therefore to be expected that the side-blown trumpet should be found in Africa and, further, that the negroes, on coming to America, should still make such trumpets, although of other materials. It is only in accord with the laws of conservatism.[1]) The Bush negroes of Surinam still have side-blown trumpets (Fig. 37 E, F) which, though of wood and tin-plate, are plainly copies of the trumpets used by their forefathers in Africa.

S
534
174

In pre-Columbian times there were in S. America no suitable horns for making trumpets. Trumpets were made of other materials, the most primitive being probably large seashells. To make a trumpet of a large shell one only needs to knock off the point. It becomes an end-blown trumpet. The pre-Columbian date of end-blown trumpets is proved by numerous finds on the coast of Peru *where, on the other hand, a side-blown trumpet has never been found.*[2])

Thus there are no archaeological proofs that the side-blown trumpet in S. America is pre-Columbian. A fact which is against the idea that sideblown trumpets were brought to S. America by negroes is their considerable distribution and above all that a trumpet-like musical

---

[1]) PROFESSOR VON LUSCHAN (P. 191.) says about the side-blown trumpets from Benin. »Dem Beispiele von HORNBOSTEL und SACHS folgend, bezeichne ich als Querhörner solche hornförmige Blasinstrumente, die nicht an der Spitze angeblasen werden, sondern an einem seitlich angebrachten Loch. Dabei wird man zur Erklärung einer solchen uns zunächst fremdartig erscheinender Einrichtung wohl daran denken dürfen, dass die ältesten Blasinstrumente aus Tierhörner hergestellt wurden, und dass es ganz ungleich einfacher war, etwa ein Antilopen- oder Ziegenhorn von der Seite her anzuschneiden als von der Spitze an abzutragen oder anzubohren. An der so gewonnenen Form hat man dann wohl festgehalten auch wenn man die Blashörner aus Elfenbein oder Holz oder gar aus Metall herstellte.«

[2]) In the literature to which I have access none such are mentioned.

South American Indians 53

534
174

instrument was found at the upper Rio Xingú which was evidently blown from the side.[1]) We must remember, however, that a period of 400 years has elapsed since the first negroes arrived here. As early as ORELLANA's time the Indians had learnt from the Whites or the negroes to make stringed musical instruments.

Another fact against the African origin of the side-blown trumpet is, perhaps, the occurrence of considerably divergent types among different tribes. This may be because the Indians had a great variety of end-blown trumpets first and afterwards made side-blown trumpets on their pattern. Granting the introduction of side-blown trumpets by negroes in S. America their wide distribution is very likely due to their having been a coveted culture-element, and a culture-element independent of the external circumstances under which the tribes live.

The non-occurrence of the side-blown trumpet within the western area of civilization speaks for its post-Columbian origin in America. As far as I know, it was also unknown within the Central American and Mexican areas of civilization. Side-blown trumpets are not mentioned from N. America.[2]) It is highly improbable that a culture-element of this kind—independent as it is of natural condi-

---

[1]) We may, perhaps, find an explanation of this in the following quotation from KARL V. D. STEINEN:

»Zu unserer Ueberraschung fanden wir auch eine eiserne Meisselspitze und bei einem Kinde ein Schnürchen blaue Perlen vor. Wir konnten nicht gewiss feststellen, auf welchem Wege sie hierher gelangt waren; ich deutete ihre Beschreibungen und Antonio's unklare Angaben so, dass sie von einem Stamm des untern Paranatinga, den der Grossvater auf einem Streifzuge besucht hätte, mitgebracht worden seien.« (2) P. 173.

[2]) It is of great theoretical interest that N. American Indians did not use the horns of the bison for trumpets, though they were very suitable. They had end-blown trumpets of large shells and of wood »We learn from historical sources that some varieties of shell, including the conch, were employed by the natives of the E., S., and S. W. for trumpets . . . *Handbook* Part 2, P. 540.

S tions — should have occurred within the Amazon basin,
534 and not within the areas of civilization in the west and
174 north-west, if it really were pre-Columbian.

S By means of far-reaching trade connections it is certain that European and, possibly, African ideas were spread
174 far and wide at the beginning of the Conquest period.
437 *Within a large part of America the continuity between the*
534 *tribes was at that time, still undisturbed.* When the Whites had completed the conquest of all the great highways — the navigable rivers — trade among the Indians ceased or was at least diminished. The wide extent of inter-Indian trade already appears from the fact that the Indians of the upper Amazon in the seventeenth century obtained axes and knives of iron from Guiana[1]). This proves that Indian trade was carried on over immense distances. Thanks to this trade there were also spread, of course, many purely Indian ideas. Where large tracts are occupied by Indians, trade is still very lively, as in Guiana, along the upper Orinoco and in the Chaco. Only a short time ago Indians appear to have carried on a trade in weapons between Guiana and Rio Negro.[2])

S In what I have now said I do not consider that I have
174 proved finally that the side-blown trumpet in S America
534 is an African culture-element. I have however demon-
177 strated that is highly possible, and that the question deserves attention.

C The information I give below, which is based on the
Ce literature on the subject and on Museum specimens to which
534 *I have had access, indicates my knowledge of the occurrence*
174 of trumpets in S. America. Thus it verifies Map 10.
177 The end-blown trumpet may have been obtained by the Chiriguano and Chané from the western area of civilization. In this case the original trumpets must have been of some

[text continues on p. 126]

---

[1]) Manuel Rodriguez Lib. 2, Cap. XI, P. 131.

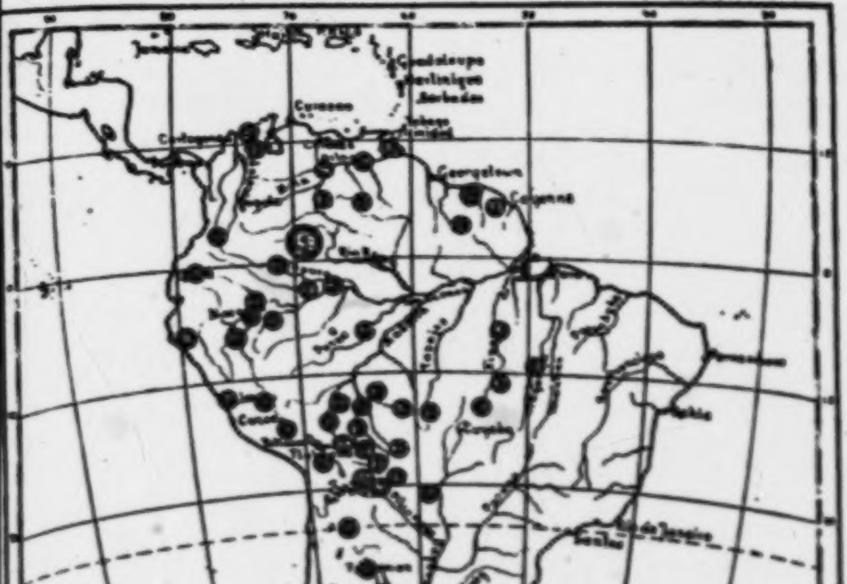
[2]) Koch-Grünberg (7).

S:Nordenskiöld E-5,4 (1908-1909. 1913) 1920

SF10 Chiriguano SF10

Chane SF8

South American Indians 53


Guadeloupe
Martinique
Barbados
Curaçao
Tobago
Trinidad
Georgetown
Cayenne
Cuzco
Tucuman
Santiago
Buenos Aires
Rio de Janeiro

Map. 11. The distribution of the pan-pipe.

C
Ce
102
534
171*

S
102
171
534

C
Ce
534
174
177

other material than the cowhorns introduced by the Whites, e. g. of calabashes, like the old trumpet from Caipipendi. Mouthpieces with lips were presumably, as I said, introduced by the Whites. COMINGES[1]) relates the following little episode which is significant as showing how the Indians learn the use of musical instruments from the Whites. »Á su vista se me occurió la idea de fabricarles un clarinete, lo que hice en pocos minutos con una caña tacuara, del que se arrancaron notas muy agudas parecidos á las que produce la dulzaina; lo que alegró tanto á la concurrencia que hasta los viejos me metian cañas por los ojos bara que les hiciese gaitas, en cuya operación me pasé el resto de la tarde y parte de la noche.»

C
Ce
534
*171

The panpipe is very rare here. It consists of four reeds which I have not seen bound together. In the following table and in the accompanying map 11 I have endeavoured, on the basis of the investigations of PATER SCHMIDT, some other writers, and of myself, to indicate the distribution of the panpipe in S. America. The map does not enlighten us as to whether the Chané got the panpipe from the area of civilization in the west, or if it came to them from Indians in N. E. Bolivia. The latter seems the likeliest supposition, as it only occurs within the northern part of the Chané country. It is not a culture-element from Guarani Indians. It is interesting to notice that the panpipe has by no means so great a distribution at it might have. In the Chaco there is abundance of material for panpipes, but they are unknown there. In the wealth of old literature dealing with the Indians on the coast of Brazil, I have found no hints of the panpipe. Oddly enough the panpipe is also unknown among the Indians of the Roraima region. Nor is the panpipe known to the Cainguá Indians. Very possibly the distribution of the panpipe has been considerably extended in post-Columbian times. The well-known (prestigation of von Hornbostel points to the panpipe being an Andine culture-element — at least in N. W. Brasil.

---

[1]) P. 227

C
Ce
534
171
[102]

Table 13. Map. 10.

End-blown trumpet.[*]

S
102
171
534

1. Choroti.
2. Ashluslay.
3. Tapiete.
4. Chiriguano, R. M. E. 511, E. 573. (without mouthpiece).
5. Chané, R. M. P. 106. (with mouthpiece).
6. Mataco.
7. Toba.
8. Lengua, Hawtrey P. 293.
10. Araucanians, Guevara (1) P. 170.
12. Mbayá, Sánchez-Labrador Vol. 2, P. 4.
13. Karajá, Krause P. 316.
16. Guató, Max Schmidt (3) P. 309.
18. Quichua. «Quepa es una suerte de trompetilla que hacen de un calabazo largo.» «Tocan asimismo caracoles.» Cobo, T. 4, P. 229.
19. Aymara.
30. Guayaqui, Kunike Fig. 8.
34. Jivaro, Rivet (1) P. 53.
36. Ijca, Bolinder (4) P. 269. Köggaba, Preuss P. 452.
38. Tupinambá, Lery Plate P. 240.
43. Huanyam, G. M. 15. 1. 590.
48. Indians Northwestern-Brazil. Koch-Grünberg (1) P. Vol. 1. Fig. 126 and 196.
55. Caribs, Surinam, Encyclopaedie P. 495. Letter from Josselin de Jong. (Museum Leiden, Serie 1817 nrs. 193 and 194.)
69. Ipurina, Ehrenreich (2) P. 71; Steere P. 378.

[*] I have assumed all the shell trumpets to be end-blown. Side-blown shell trumpets are, as far I know, unknown from S. America.

[illegible] I-4 (1900-1909, 1913) 1920
SF10 Chiriguano SF10
Chaco SF8
South American Indians 53

C
Ce 95. Chibcha, Restrepo P. 106.
99. Cumanagoto, Gomara P. 207.
534 A. Indians on the coast of Peru, Mead (1).
•171 BC. Pana, Pittier de Fabrega P. 324.
102 D. Puna de Jujuy and Quebrada del Toro, Eric von Rosen (4) P. 134 and P. 205.
F. San Juan, Debenedetti (4) P. 235.
5 X. Yuruna. M. f. V. B. (V. B. 1725).
102 1 F. Indians, Sierra Nevada. Oviedo T. 2. P. 282.
171 V 3. Saliva, Gumilla T. I. P. 217.

Side-blown trumpets.

534
13. Karajá, Krause P. 316.
14. Bororó, Karl von den Steinen (3) P. 496.
20. Bororó, Max Schmidt (4).
28. Kamayurá. M. f. V. B. (V. B. 2940.)
42. Pomeroon, G. M. 15. 1. 847.
47. Indians Roraima, G. M. 12. 1. 50.
48. Indians Northwestern—Brazil, Koch-Grünberg (2) Fig. 140.
50. Šavajé, Krause P. 365.
64. Huari.
85. Juri, Ratzel Vol. I. P. 464.
98. Tembé, Barbosa Rodrigues (2) P. 43.
P. Island of Aruba, Ethnographical Museum in Leiden. Serie 472, No. 9. Kindly communicated by Dr. Josselin de Jong.
X. Yuruna, M. f. V. B. (V. B 1726, V. B. 1728 b, B. 1727).
1 P. Negroes, Surinam, R. M. Collection of Baron Axel Klinckowström.
3 F. Mauhé, Ratzel Vol. 1, Plate P. 497.
3 H. Parintintin(?), Rio Tapajos. (Fig. 37 D). It is probably correct to assume that these trumpets are from the Rio Tapajos region. It is very doubtful if they are from the Parintintin, as they form part of an old collection (Dr. Carvalho) which seems to be rather carelessly labelled.
5 X. Canelo, Karsten (11) P. 51.

Trumpets of which little is known.

C
Ce

25. Mojo, CASTILLO P. 341. The horns for the trumpets the Indians brought from Sta Cruz de la Sierra. EDER P. 334. »primum cucurbitis oblongis aut rotundis constat; illas more tubarum, has inserta fistula inflant«. 102 534 171?
29. Caingang, BLEYER P. 835; D'ESCRAGNOLLE TAUNAY P. 578. S
38. Tupi, Coast of Brazil. SOARES DE SOUZA P. 300. (Tupinambá), P. 312 (Tupinaé), P. 314. (Amoipira); LERY P. 234; »blasen in bosaunen von kürbissen gemacht.« STADEN. 102 171 534
40. Itatines, LITTERAE ANNUAE 1594—1595 P. 751.
56. Mundrucú, TOCANTINS P. 134.
91. Indians Rio Amazonas, CARVAJAL P. 64.

Table 14.

The pan-pipe. Map. 11.

4. ? Chiriguano.
5. Chané, R. M. P. 174.
11. Chamacoco, PATER SCHMIDT P. 1060.
13. Karajá, EHRENREICH (2) P. 24.
18. Quichua, COBO Vol. 4. P. 229.
Museum Copenhagen (H 2057), Quito.
19. Aymara.
20. Paressi, MAX SCHMIDT (4) P. 240.
22. Yuracáre, NORDENSKIÖLD (9) Fig. 57.
23. Churápa, R. M. Tj. 33.
24. Chimáne, G. M. 15. 1. 1001.
25. Mojo, EDER P. 332, Fig. 8.
28. Indians upper Rio Xingú, K. v. D. STEINEN (3) P. 327.
31. Ojana, Trio, GOEJE (1) Pl. VII, 13.
33. Campa, ORDINAIRE P. 281.
36. Ijca, Köggaba, BOLINDER (4) P. 263.
37. Motilon, » » P. 270.
40. Guarayú (Guarayos), R. M. G. 47.

C

Ce

534 41. Pauserna, G. M. 15. 1. 848.
102 43. Huanyam, G. M. 15. 1. 595.
'171 48. Indians Northwestern Brazil, Koch-Grünberg (2). Pater Schmidt P. 1060.
S
102 54. Guahibo, R. M. H. M. K. II. 7.
171 55. Caribs, French Guiana, Barrère P. 132.
534 58. Cavina, G. M. 15. 1. 1464.
62. Indians Rio Yapurá, Whiffen P. 210, Pl. XLIX
62. Chacobo, R. M. Ch. 73.
67. Bayá, K. v. d. Steinen (3) P. 327.
68. Omagua. Pater Schmidt P. 1060.
74. Tamanaco, Gilij Vol. 2, P. 275.
85. Juri, Ratzel Vol. 1, P. 464.
A. Found on the coast of Peru. Mead (1).
7C. Itonama, G. M. 15. 1. 1270.
3D. Cocama, Pater Schmidt P. 1060.
E. Diaguita, Ambrosetti (6) Segunda parte, P. 469. Earthen vessel representing a figure with a pan-flute in the hands found at Amaicha, Valle Calchaqui, Provincia de Tucuman. Ambrosetti (2) T. 29, P. 221.
2F. Indians Susques, Boman P. 464. Imported from Bolivia.
9H. Indians at Sarayacu, Smyth and Lowe P. 214.
8P. Paumari, Steere P. 387.
V5. Maquiritare. Pater Schmidt P. 1060.
V8. Peba. " " "
V9. From Timana, Preuss. Pl. 24, Fig. 19.
X. Yuruna, K. v. d. Steinen (2) P. 259.
X3. Piaroa, R. M. H. M. K. I. 72.
9X. Passe, Pater Schmidt P. 1060.
aa Found at Serena, Chile. Medina (1) Fig. 73.
99 Found at Iruya, Argentine. Eric von Rosen (4) P. 581.

[illegible] [illegible] [illegible]

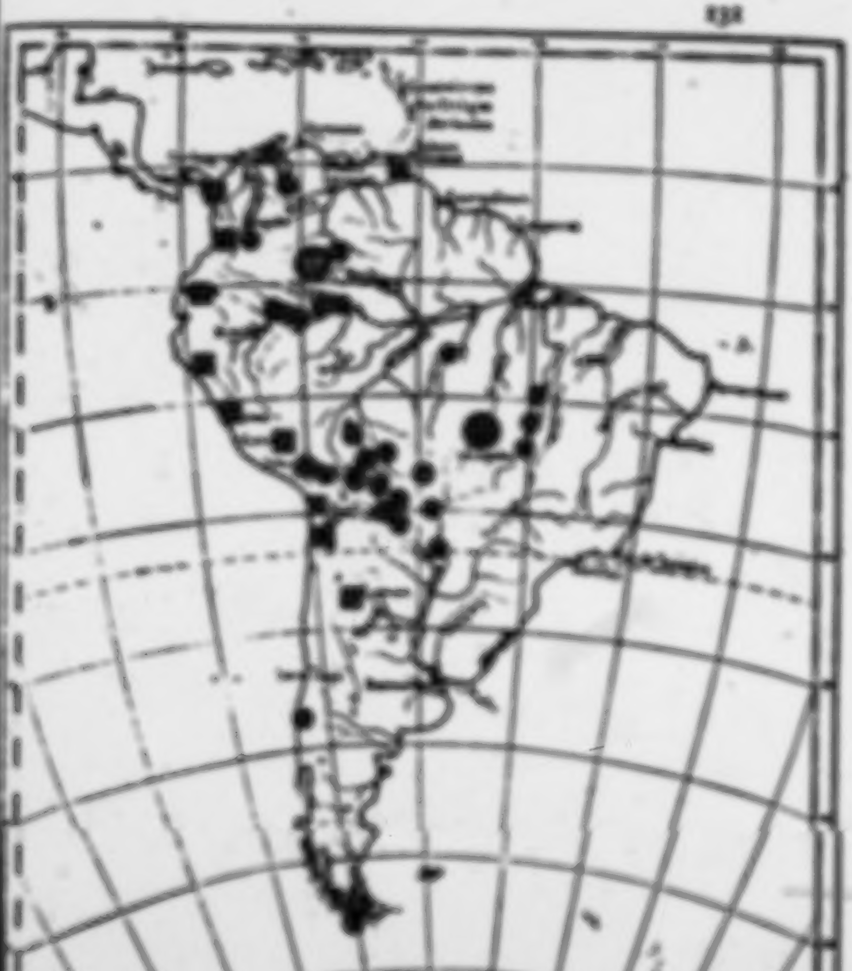
[illegible] Chiriguano [illegible]

Chane [illegible]

South American Indians 53

131

[illegible]



Map 11. The distribution of masks.

● = dancing masks. ■ = burial masks and other masks.

XXI.

Dancing Masks.

C
CE
177
532
557
585

A Chané Indian on the Rio Itiyuro told me that mask dances were introduced among the Indians by the Whites. Father Bernardino de Nino was also told by the Chiriguanos that the celebration of the carnival came to them from the Whites, and he plainly considers that we here have to do with a custom which is not of Indian origin. This is certainly wrong. The fixed date of the festival came to the Indians from the Whites, but the manner of celebration is manifestly derived from an old Indian custom which corresponds to similar masquerades described from Brazil by Koch-Grünberg. This appears from Nino's own account of the celebration of the carnival.

The ceremony is at least partly a feast of fruitfulness?¹) The mask dancers throw the husks of beans and the offal from chicha-brewing at the other dancers in order to secure a good harvest. Just as in northwestern Brazil, some at least of the Chiriguano-dancers appear disguised as animals which they imitate. Nino says that towards the end of the festival the old people weep because they call to mind the dead who cannot share in the pleasure. The ceremony is ended by the participators going out of the village and throwing their masks into the river or some other water-course and there washing their faces and hands. Sometimes they burn the masks, as is done in northwestern Brazil.

Batirayu, a most reliable old Chané Indian, assured me that when he was a boy he had seen masks on the Rio

[illegible]

---

¹) P. 228.

Parapiti different from those now in use. He was of the opinion that masks were used before the Whites came to their country. On these occasions fruit-shell anklet-rattles were worn and also dance ornaments of parrot feathers. Obviously it is quite certain that masquerades are an original Indian custom here as well as in other parts of S. America, and have been celebrated at a time of year when the Whites have a festival of a somewhat similar character, externally at least. In the same way the Quichua kept their old feasts on the festival day of the Church of Rome.[1] This is most certainly still the case among both the Aymara and the Quichua, whose masquerades on the great Roman Catholic festival days are anything but Christian in character, and would certainly form material for extremely interesting studies on the primitive religious conceptions of these Indians.

Ce
177
527
532
535
[115]

Judging by what an authority like Bayrayu says, it is doubtful if the type of mask now used, viz. faces of wood or calabash, is Indian. It must, however, be remembered that Bayrayu only speaks of what occurs among the Chané on the lower Rio Parapiti. Wooden masks, representing a human face, are however not unknown to other Indians. Senechal de la Grange found a mask of this kind in a grave in the desert of Atacama.[2] Masks of wood and stone have been found in the Diaguita territory.[3] The Ijca have wooden masks[4] as also the Araucanians.[5] The Indians on the Rio Xingú have wooden masks which, however, are rather different from those that occur among the Chiriguano and the Chané. The latter are more like those of the Araucanians and the Ijca. (Fig. 59). a/a

C
Ce
532
171
Ce
[114]

Generally speaking, dance-masks are very widely dis-

---

[1] [illegible] after [illegible] P. 138.

[2] Boman I. 396.

[3] Outes (3) v Bruch P. 33.

[4] Bolinder (2) P. 138.

[5] Guevara (1) Fig. 3.

a/a [erratum, should be Fig. 58. cf errata sheet p. 245]

C
Ce
532
*171

tributed in S. America. They are only used on particular occasions, and then as a rule destroyed. It is therefore likely that such masks still exist among various tribes where they have been overlooked. Dance-masks are also mentioned in old narratives by ACOSTA and COBO. It is likely, too, that some of the «idolos» mentioned by other old authors were dance-masks.[1]

In the western culture zone many masked mummies have been found. During the Inca period it was still the custom to put masks over the faces of the dead. SARMIENTO speaks of mummies of Inca rulers wearing masks.[2] The custom of masking the dead is not known east of the Andes.

UHLE[3] found at Pisagua in northern Chile masks of Vicuña skin, that he believes were used by the Indian when hunting Vicuñas. At San Rosario in Llusa-Valley (Dept. Arica) he found a rock-drawing showing masked hunters shooting at 4 or 5 fleeing Vicuñas. Masks of the facial parts of human skulls have been found at S. Mateo on the Oroya railway in Peru. These are now preserved in the ethnographical museum at Rome.[4]

There is yet a fourth kind of mask. It is the one used by the Aymara and the Quichua on the heights of the Andes as a protection during a snowstorm. They are knitted of wool.

As far as I know, masks did not occur among the Tupi Indians on the Brazilian coast. Consequently I deem it probable that the Chiriguano only learnt the use of the

---

[1] e. g. CARVAJAL P. 44. «Y en esta casa se hallaron dos ídolos tejidos de pluma» (Palma, segun el otro manuscrito.) «de diversa manera, que ponian espanto, y eran de estatura de gigante y tenian en los brazos metidos en los molledos unas ruedas á manera de arandelas, y lo mismo tenian en las pantorillas junto á las rodillas: tenian las orejas horadadas y muy grandes, á manera de los indios del Cuzco, y mayores.»

[2] P. 68.

[3] Communicated by letter.

[4] GIGLIOLI.

Mataco SI7
South American Indians S3

dance masks from the Chané. Where the latter learnt their use it is at present impossible to say.

The map 12 and table 15 show us the distribution of the mask in S. America.

C
Ce
532
171*

The places at which burial masks have been found are indicated in the map by squares. In making out this list I have followed PATER SCHMIDT, to whose statements I am able to make a few additions. The fact of the Ona and Yahgan Indians having masks seems to prove that their use is very ancient in S. America. At a ceremony of exorcism among the Mataco I saw some men with pieces of cloth hanging over their faces. I take this to be the most primitive kind of mask.

C
Ce
102
532
171x

M
522
789

Table 15 showing the Distribution in S. America. (map 12) of dancing masks and other masks.

S
102
532
C
Ce
102
532
171*

3. Tapiete, R. M. L. 216.
4. Chiriguano, R. M. E. 601.
5. Chané.
8. Lengua, GRUBB Plate P. 180.
10. Araucanians, GUEVARA (1) Fig. 5; PATER SCHMIDT P. 1057.
11. Chamacoco, PATER SCHMIDT P. 1060.
13. Karajá, KRAUSE P. 331.
18. Quichua, ACOSTA T. 2, P. 225; SARMIENTO DE GAMBOA P. 68 (Burial masks); COBO V. 4, P. 102. «Y cada atambor tocaban cuatro indios principales vestidos de muy particular librea con camisetas coloradas hasta los pies con rapacejos blancos y colorados; encima se ponían unas pieles de leones desollados enteros y las cabezas vacías en las cuales les tenían puestas unas patenas, zarcillos en las orejas, y en lugar de sus dientes naturales, otros del mismo tamaño y forma.»
19. Aymara. Mestizos, Bolivia. Quite common during the carnival.

S
102
532
c
ce
102
532
*171

Not on the map Paressi (?). According to Max Schmidt the Paressi most likely do not use the dancing mask. (4) P. 198.
23. Churápa, R. M. Tj. 76.
25. Mojo, Eder P. 337.
27. Ona, Cooper P. 156.
28. Indians Rio Xingú, Karl v. d. Steinen (3)
36. Ijca, Bolinder (4) P. 258.
48. Many tribes in North-western Brazil, Koch-Grünberg (2).
50. Šavajé, Krause P. 367.
56.? Mundrucú, Uhle (1) Vol. 2, Taf. 26.
65. Baure, R. M. C—B. 5.
85. Juri, Martius (2) T. 3, P. 1227.
86. Yahua, Castelnau, Vol. 5, P. 21.
94. Chiquito, Herzog P. 21.
95. Chibcha, Restrepo P. 68.
A. Peruvian coast, Ancon and other places. (Burial masks). Baessler P. 141.
C. Puna de Atacama, Boman P. 746.
E. Mask of stone, found at Catamarca, Outes (5) y Bruch P. 57. Fig. 31.
1 B. Ticuna, Pater Schmidt P. 1060.
1 E. Cayubaba, R. M. F. 4.
9 L. Baniva, Arvelo (Communicated by Dr. Koch-Grünberg).
1 M. Indians Darien, Oviedo Vol. 2, P. 414; Martyr Vol. 1, P. 219. Second Decade. Burial masks of gold.
3 M. Chamas, Cuicas, Timotes etc. Sierra de Merida, Salas P. 52.
9 X. Passé, Pater Schmidt P. 1060.
V 8. Peba, Poeppig P. 164.
X 5. Yaghan, Cooper P. 156.
bg. Pisagua, Uhle (6) P. 16. Burial masks.
bh. Ecuador, Golden mask. Joyce. Pl. IV.
bi. Quimbaya, Golden mask. Joyce. Pl. IV.
Not on the map San Mateo at the Oroya-railway, masks of the facial part of human skulls.
• Chanchamayo, Pater Schmidt P. 1060.

Ce
273
415
531

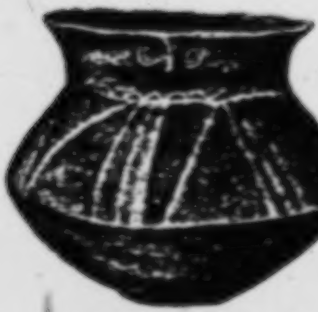


Fig. 38. Vessel for serving maize-beer from the Chané. Rio Parapiti. R. M. P. 313. 1/8

XXII.

Pottery.

C
Ce
323

The earthenware vessels of the Chiriguano and Chané are made in the usual way by building up layers of strips of clay[1]). Stones, mussel-shells and empty corn-cobs are used for smoothing the vessels. The last mentioned leave characteristic marks. It looks as if some comb-shaped instrument had been employed. These marks diminish the smoothness of the vessel, so that it slips out of the hand less easily. Corn-cobs are therefore more especially used in the making of cooking-pots and large utensils. Judging by the

C
Ce
[171]

pottery which I collected on my journeys, the practice of using corn-cobs in this way would seem to be derived from the mountain civilisation. I have seen vessels marked in this way found at Ojo de Agua in the most northern part of Argentina, where they revealed the fact that the Indians that used these vessels had maize. On the other hand, they are lacking on the pottery which I found in my excavations at Caipipendi and in the whole of N. E. Bolivia. They are also lacking in Misiones in Argentina.

---

[1]) See Part I

C
Ce
323
415
[531]

The Chiriguano, as well as the Chané at Rio Itiyuro, have elaborate pottery of richly varied shapes and often beautifully ornamented. The Chané at Rio Parapiti have plainer pottery. The development of the ceramic art in the various tribes I got to know has differed greatly. The Chima and the Tambopata-Guarayo who are pretty certainly identical with them, are the only Indians I visited who have no earthenware vessels. The pottery of some tribes is a work of art, while others only make the most necessary household utensils. This is not necessarily connected with the tribe's state of civilization generally. Thus in several respects the Yuracare stand as high as the Chiriguano but the former have very poor pottery; the latter highly developed pottery. If such peoples were studied archaeologically, the former would yield hardly any remains while the latter would yield many beautiful specimens. Wrong conclusions might then be easily drawn as to the stage of civilization of the two tribes.

C
Ce
*171
415
323

Below will be found indicated how many different types of earthen vessels are found among the tribes I visited. It will be seen that the Chiriguano and Chané (Rio Itiyuro) have by far the largest number of shapes of earthen vessels.[1] This is simply due to their having experienced such

---

C
Ce
[114]
[126]

[1] On entering a Chiriguano or a Chané hut, one sees a lot of earthen vessels of which the majority are unpainted. All the vessels of various shape and ornamentation which I have collected are from several hundred Chiriguano and Chané huts. It is a selection out of many thousand vessels which I have made and it shows how pottery varies within the tribes. In most Indian huts there will be found but a small number of different types. Unless we bear in mind that the collection is a selection, it leaves the impression that the pottery of these Indians is of much more varied shape than is really the case. What I remark here of my collection of pottery holds good of nearly all collections in ethnographical museums. When we see a cupboard full of various articles from an Indian tribe, we must not think that all these things are used by every family in the tribe. It is properly a collection of all the different objects used by a large number of individuals.

C
Ce
171*
323
415

strong influence from the area of civilization in the west and above all the south-west.

Over fifty types.	*Over ten types. but under fifty.*	*Over two types. but under ten.*
Chiriguano.	Chané. (Rio Parapiti)	Chacobo.
Chané. (Rio Itiyuro)	Choroti.	Chimáne.
	Ashluslay.	Yuracáre.
	Toba.	Churápa.
	Mataco.	Pauserna.
	Tapiete.	Guarayos.
		Huari.
		Huanyam.
		Cavina.

I am unable here to give an account of all the different shapes of earthen vessels found among the Chiriguano and Chané. Some of them have been depicted by OUTES but there are many more. Those depicted here should, however, give some idea of the variations in these Indians' pottery. Some types are local and thus characteristic of certain villages; others are certainly individual. Thus I have seen different women in the same village turn out very different vessels. Some women are noted for making specially fine earthenware. They are celebrated for their pottery far outside their own village.

C
Ce
[554]

The Chiriguano and Chané use earthen vessels for boiling and roasting their food, as receptacles for food and other things, for carrying water, for the serving of food, for the burial of the dead and to whirl the spindle on when spinning. (Only the Chané on the Rio Parapiti.)

C
Ce
415
Ce
[283]

We see that a large number of the earthen vessels here are provided with ears or handles. In Part I of this work I claim to have proved that the ear is a culture-element derived from the Andine area of civilization.

C
Ce
415
*171

Occasionally one finds Chiriguano and Chané vessels provided with holes under the edge in the same manner as is usual in calabashes. Strings are then passed through these holes by which to hang the vessels up. This invention was here probably earlier than the ear. Thus, during my excavations at Caipipendi, I found a vessel with these string-holes, while handles and ears were lacking on the pottery found there. The distribution of such string-holes I have endeavoured to indicate on the map, and in the table below.

Such string-holes were known within the old western area of civilization, though they were not in general use. In S. E. S. America they seem to have been the precursors of real handles. Thus Mayntzhusen[1]) writes with regard to the shape of the vessels, from the Upper Parana that they are usually without handles. In place of these there is often a boring through the rim of the vessel, or two outside plugs on opposite sides of it. These plugs were sometimes pierced to allow of a string being introduced. An enlargement of this hole in the plug, large enough for a finger to go through, appears to have developed into the ring-shaped handle which occurs quite sporadically.

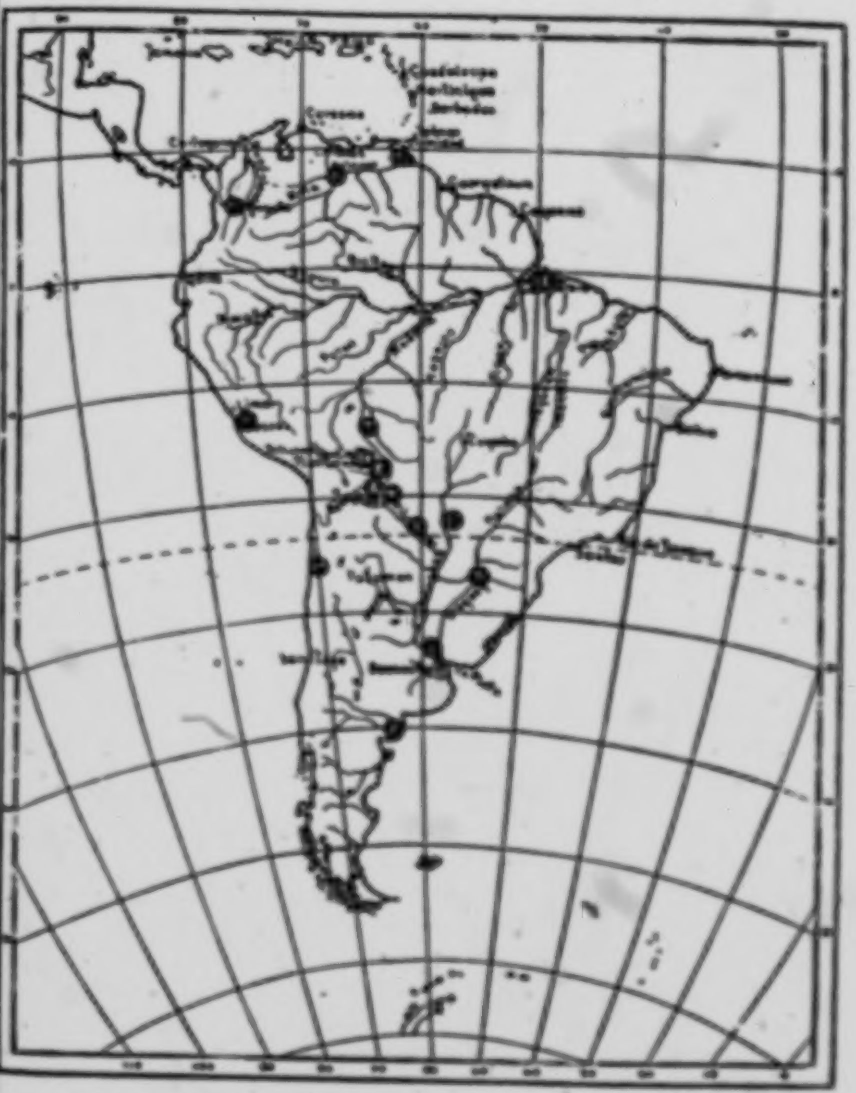
The Indians probably got the idea of providing their earthen vessels with string holes from their custom of making string-holes in calabashes. This invention is here evidently older than the real handles or ears. This holds good, pretty certainly, not only for the Chiriguano district, but for large parts of S. E. S. America. It would be interesting to examine the collections of the great museums and then draw a map showing the distribution of earthenware with string-holes. The map published here is probably very incomplete. Its main purpose is to create interest in the distribution of this invention.

---

[1]) P. 466.

South American Indians 53

C
Ce
102
415
171*
S
102
415


Guadeloupe
Martinique
Barbados
Curacao
Cayenne

Map 13. The distribution of vessels with string-holes.

C
Ce
102
415
*171
5
102
415

Table 26,

Vessel with string-holes. Map. 13.

2. Ashluslay, R. M. A. 1587.
4. Chiriguano, R. M. E. 987.
12. Caduvei, Boggiani (2) P. 42. Fig. 13.
M. Mojos, R. M. T. 577.
A. Coast of Peru. Ica. In private collection.
N. Upper Rio Parana, Mayntzhusen P. 466.
O. Delta de Parana, Torres (2) P. 87.
Å. Caipipendi, R. M. K. 93.
a. i. Manizales, Uhle (1) Vol. 1, Pl. 2, Fig. 10.
a j. Los raudales Rio Orinoco, Marcano Pl. XXIX.
a k. Saipina, G. M. 15. 2. 7. Fuerte Samaipata, R. M.
a m. Taltal, Chile, Evans (1) P. 22.
c. Marajo, Netto P. 354. 355.
e. Sara, Nordenskiöld (10) Fig. 30.
p. San Blas, Outes (4) P. 264.

Ce
415
532

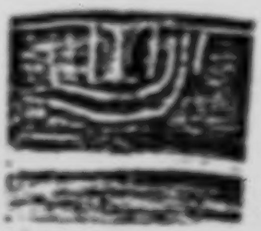


Fig. 30. Human face painted on the border of a vessel from the Chané. Rio Parapiti. R. M.

C
Ce
415
*171

Among the many types of earthen vessel used by the Chiriguano and Chané here are several which are highly reminiscent of types we are acquainted with from the Mountain civilisation, e. g. double pitchers. (Fig. 42.8) They do not occur in N. E. Bolivia. Debenedetti¹) has pointed out the similarity between the pottery which he

---

¹) (2)

found at Tilcara and that of the Chiriguano. I here reproduce from the work of DEBENEDETTI some types of earthenware to which we find answering types among the Chiriguano. (See fig. 48). It must be borne in mind that the Chiriguano country at Cuyambuyo approaches the Humahuaca valley.[1] The Humahuaca and Chiriguano were allied in the first encounters with the Spaniards.[2]

c
CE
415
171*

c
[608]

In Part I I have already pointed out the similarity between Choroti and Ashluslay water-pitchers and the Incan »aryballer».

The question arises whether or not all water-pitchers with a narrow neck which can be grasped by the hand are derived from the Mountain civilization. They are not found, as far as I have been able to find, in all N. E. Bolivia, nor in the whole of eastern S. America except by Indians that have been very much influenced by the Whites. The Chiriguano word for water-pitcher is »irua», which is strongly reminiscent of the Quichua name »yuro» for the same kind of earthen vessel.

Pitchers with a bulging neck (fig. 47,1) are common among the Chiriguano and the Chané at Rio Itiyuro. I am acquainted with them from my archaeological excavations at Caipipendi. They are mentioned by AMBROSETTI[3] from Tucuman. The type occurs, moreover, within the western area of civilization whence it surely must have come.[4]

Handles shaped like animals or human faces do not occur on the pottery of the Chiriguano and Chané.

The Chiriguano and Chané do not make feet to their vessels as is common on the earthenware from the Mounds in Mojos.

---

[1] Compare P. 88.

[2] Lozano II. con ellos los Omaguacas gente por extremo feroz ...... y mataron á los Sacerdotes, que los doctrinaban, y á muchos Españoles que cayeron en sus manos, infestando con robos, y muertes los caminos públicos, y confederados con los Chiriguanás......

[3] [8].

[4] Reiss and Stübel, T. 3, Pl. 90, Fig. 17; C. 8.

C
C4
415
417
[252]

Only a few vessels are provided with ~~spouts~~ lids in rims which here seem to be an idea obtained by the Indians from the Whites.

Bowls with holes in the bottom which are used for steaming have already been mentioned in the foregoing. This applies also to bowls for the roasting of maize.

C
C4
[177]

The Chané on the Rio Parapiti have small plates which they sometimes use in spinning. I have not seen the like elsewhere. Occasionally one sees, among the most civilized Chiriguano and Chané, fire-pans for holding hot water. (Fig. 43 a). They must have obtained the idea from the Whites.

C
C4
323

The Chiriguano and Chané understand the art of painting earthenware before burning.[1]) I have already, in Part I, endeavoured to show the geographical distribution of this invention. Whether it was known to the Chané and Chiriguano before they settled in this tract cannot be decided. The pottery I found in the archaeological excavations at Caipipendi is unpainted.

C
C4
[189]

The Chané at Rio Itiyuro sometimes paint the edge of earthen vessels after burning with resin of palo santo. This is never seen among the Chiriguano and the Chané at Rio Parapiti. As such painting is common among several tribes in the Chaco, it is possible that the Chané at Rio Itiyuro got the idea from there. The Chiriguano and the Chané at Rio Itiyuro often varnish the painted vessels after burning with a kind of gum called by the Chiriguano — staragüi-tini.

The Chiriguano and Chané also ornament their earthenware by finger-impressions. This method of ornamentation has an eastern extension in S. America. A map showing its distribution is published in Part I.

The ornamentation painted on earthenware is seen in the illustrations. The Chané at Rio Parapiti usually have very plain ornamentation.

C
C4
[537]

[1]) For this purpose brushes of Aguti hair are used. (See also Wegner p. 8.)

³[translation corrected, see errata sheet p.245.]

Maps of the geographical distribution of various kinds of ornamentation can scarcely be drawn up at present with the exception of a few very characteristic specimens, e. g. the spiral. This is found on earthen vessels from the Chané on the Rio Itiyuro, and from the Chiriguano, but not from the Chané on the Rio Parapiti.

C
Ce
323

C
Ce
[184]

The colours used by the Chiriguano and the Chané on the Rio Itiyuro are black, red, brown and white. The white is caolin, the red, brown and black are obtained by pulverizing schists of these colours. The Chiriguano sometimes mix Urucu with oil. Vessels are probably painted with this mixture only after burning.

C
Ce
[386]

Pottery is undoubtedly the chief art practised by the Chiriguano and Chané. We may, indeed, assert that it is the only one that is still of very great importance to these Indians. It is an interesting fact that, though these tribes have been in close contact with missionaries and other Whites for nearly 400 years, and though their country has been flooded with European goods, their pottery has been influenced very little by foreign culture. It is still genuine Indian. This holds good not only of its shape, but to an equally great extent of its ornamentation. It shows how conservative the Indian is towards anything that cannot make easier for him the struggle for life. A cultivated plant can spread in a few years over a large part of a continent, whereas one will not take the trouble to adopt a foreign ornamentation or foreign types of household furniture. This does not imply that the pottery of the Chiriguano and Chané now has the appearance that it had 400 years ago. It has changed, as the Indians themselves told me, but the change has chiefly consisted in ringing the changes on old Indian patterns. How and how much it has changed, can only be proved archæologically. Unfortunately, I do not possess the archæological material. What I found in the country of these Indians probably goes very much further back in time than 400 years, and has very little in common with

C
Ce
323
177

C
Ce
[181]

C ce 323 177 the ceramics of the tribes here dealt with. The ceramic art we find among the Chiriguano and Chané is, as we saw, strongly influenced by the culture-zone in the west. There is a great similarity, as I said, to the pottery that has been found in the Humahuaca Valley. It is especially the finely painted pottery which, in shape and ornamentation, recalls the pottery of the culture-zone in the west. The simple cooking-pots ornamented with finger-impressions more closely resemble what is found in the old Guarani territory in Misiones. The main difference is that the pots used by the Chiriguano and Chané are provided with ears (handles), which as a rule are lacking in the pottery from Misiones. The ear, as I mentioned, is a western culture-element. I think the explanation may be, that when the Chiriguano conquered the districts they now occupy, their own women generally or always made earthenware with finger-impressed ornamentation. As we know, the immigrant Chiriguanos C [727] carried off masses of women, presumably from Chané for the most part, but probably also from other tribes. The women abducted from the parts bordering on the old kingdom of the Incas were no doubt skilful potters, and afterwards taught their art to their daughters. It is this that now continues in the finer pottery, especially in the vessels used at great drinking-bouts.

It is very evident, as we see, that the Chiriguano and Chané pottery has been strongly under the influence of the culture-area in the west. It would be of great interest to show how far it has also been influenced by the Arawak pottery at Mojos. This cannot, however, be conclusively proved. Not even among the Chané at Rio Parapiti can any such influence be traced. This is probably because it is so long since the Chané migrated to their present district.

It may be asked how it is that the Chané at Rio Parapiti have ce [184] pottery which is plainly less influenced by the mountain civilisation than that of the Chiriguano and the

Chané at Rio Itiyuro. This may be owing to their poverty.[7] Maize-beer does not flow so abundantly there as it does among the Chiriguano and the Chané at Rio Itiyuro. The finely painted vessels are intended for festivals, and it is especially on those occasions that one sees double pitchers and other types reminiscent of mountain-culture pottery. The Chané at Rio Parapiti dwell rather remotely, at a considerable distance from the culture-area in the west. Their calabashes, too, are more plainly ornamented than those of the Chiriguano and the other Chané. This may be due partly to poverty and partly to their isolated habitation.

C
ce
323
177
ce
[184]

---

[7] I regret that I did not study the question of the supply in different places of good clay suitable for earthenware. Where the clay has to be brought from afar, it is unlikely that the pottery will be highly developed.

C
ce
[17]

415

Fig. 40.

1.	B. M. E.	8433.	Tiguipa.	Pot.
2.	» » »	8444.	»	»
3.	» » »	8437.	»	»
4.	» » »	8379.	»	»
5.	» » »	8113.	»	Vessel for serving maize-beer.
6.	» » »	8119.	»	» » » » »
7.	» » »	8370.	S. Rosa.	Bowl in which to keep salt, etc.
8.	» » »	8378.	Tiguipa.	» » » » » » »
9.	» » »	9611.	Boyuibe.	Pitcher.
10.	» » »	9328.	Itatique.	Vessel for serving maize-beer.
11.	» » »	8377.	S. Rosa.	Bowl to eat out of.
12.	» » »	8455.	Tiguipa.	Vessel for keeping seed in.
13.	» » »	8114.	»	» » serving maize-beer.
14.	» » »	8112.	»	» » » » »
15.	» » »	8372.	S. Rosa.	Bowl to eat out of.
16.	» » »	8358.	» »	Vessel for maize-beer.
17.	» » »	8420.	Tiguipa.	Pot.
18.	» » »	10026.	Yacuiba.	Vessel for maize-beer.
19.	» » »	8412.	Tiguipa.	Pitcher to carry water in.
20.	» » »	9412.	Itatique.	Vessel for serving maize-beer.
21.	» » »	9328.	»	» » » » »
22.	» » »	10024.	Yacuiba.	» » » » »
23.	» » »	10022.	»	» » » » »
24.	» » »	8869.	S. Rosa.	Pot.
25.	» » »	8337.	Tiguipa.	Bowl used for steam-cooking.
26.	In private collection.		»	Mug.
27.	B. M. E.	10130.	Ivo.	Vessel for maize-beer.
28.	» » »	10133.	»	Bowl to eat out of.
29.	» » »	9268.		Pitcher.
30.	» » »	8330.	Tiguipa.	»
31.	» » »	8358.	S. Rosa.	Bowl to eat out of.
32.	» » »	8217.	Tiguipa.	Pitcher.

415

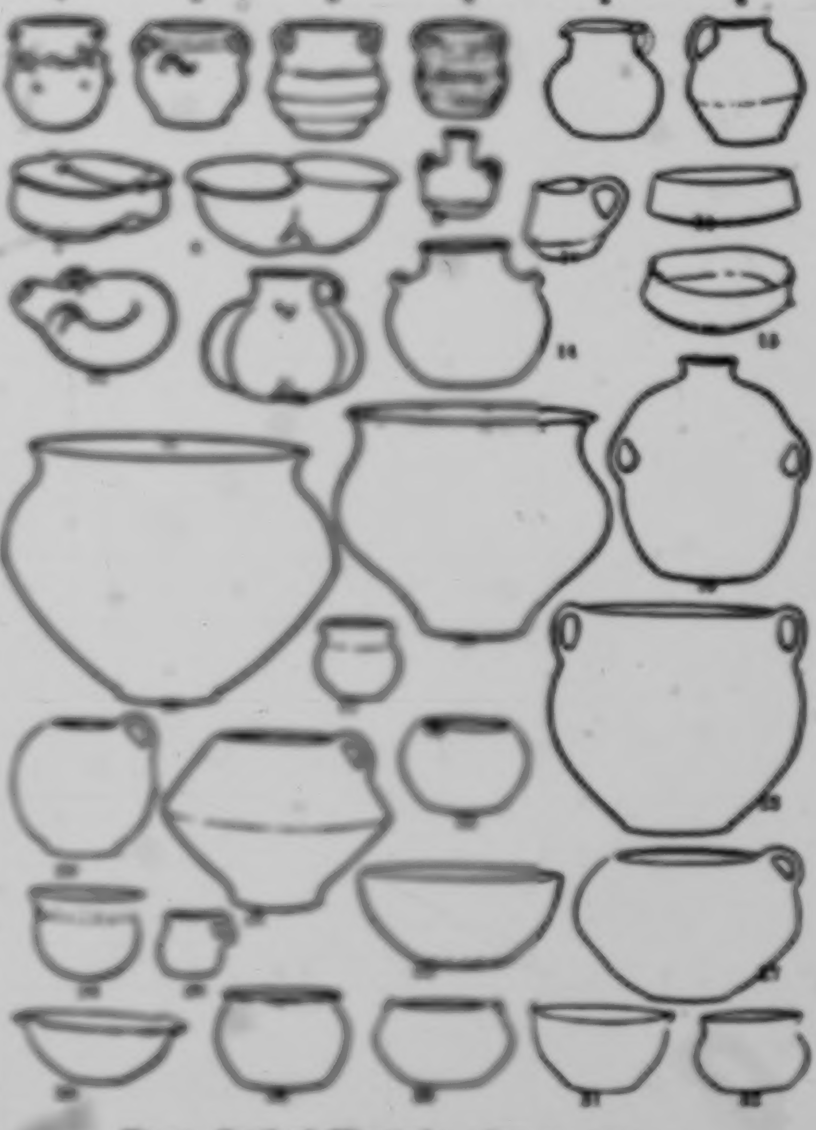

1
2
3
4
5
6
7
8
14
15
25
27
31
32

Fig. [illegible]. Vessels of different shapes from the Chiriguano. Only variations in shape are depicted. Ornamentation not depicted. 1/8

415 Fig. 41.

1.	R. M. E.	786.	Caipipendi.	Vessel for keeping seed in.
2.	• • •	772.	•	Pitcher made for a festival.
3.	• • •	743.	•	Waterpitcher.
4.	• • •	747.	•	Pitcher for serving maize beer
5.	• • •	727.	•	• • • • •
6.	• • •	726.	•	• • • • •
7.	• • •	780.	•	Vessel for keeping seed in.
8.	• • •	778.	•	Vessels for festivals.
9.	In private collection		•	
10.	R. M. E.	783.	•	
11.	• • •	774.	•	
12.	• • •	775.	•	
13.	• • •	787.	•	
14.	In private collection		•	
15.	R. M. E.	770.	•	Bowl to eat out of.
16.	• • •	736.	•	Pitcher.
17.	• • •	732.	•	•
18.	• • •	746.	•	Vessel for serving maize-beer
19.	• • •	696.	•	• • maize-beer.
20.	• • •	733.	•	Pitcher.
21.	• • •	734.	•	•
22.	• • •	753.	•	Bowl to eat out of.
23.	• • •	759.	•	Vessel for keeping seed in.
24.	• • •	761.	•	Bowl to eat out of.
25.	In private collection		•	Vessel for serving maize-beer
26.	R. M. E.	754.	Tihöipa.	• • maize-beer.
27.	• • •	757.	•	• • • •
28.	In private collection.		Caipipendi.	Small bowl to eat out of.
29.	R. M. E.	765.	•	Pitcher.
30.	• • •	704.	•	•
31.	• • •	728.	•	Vessel for serving maize-beer.
32.	In private collection.		•	• • • • •

231

415

[532]

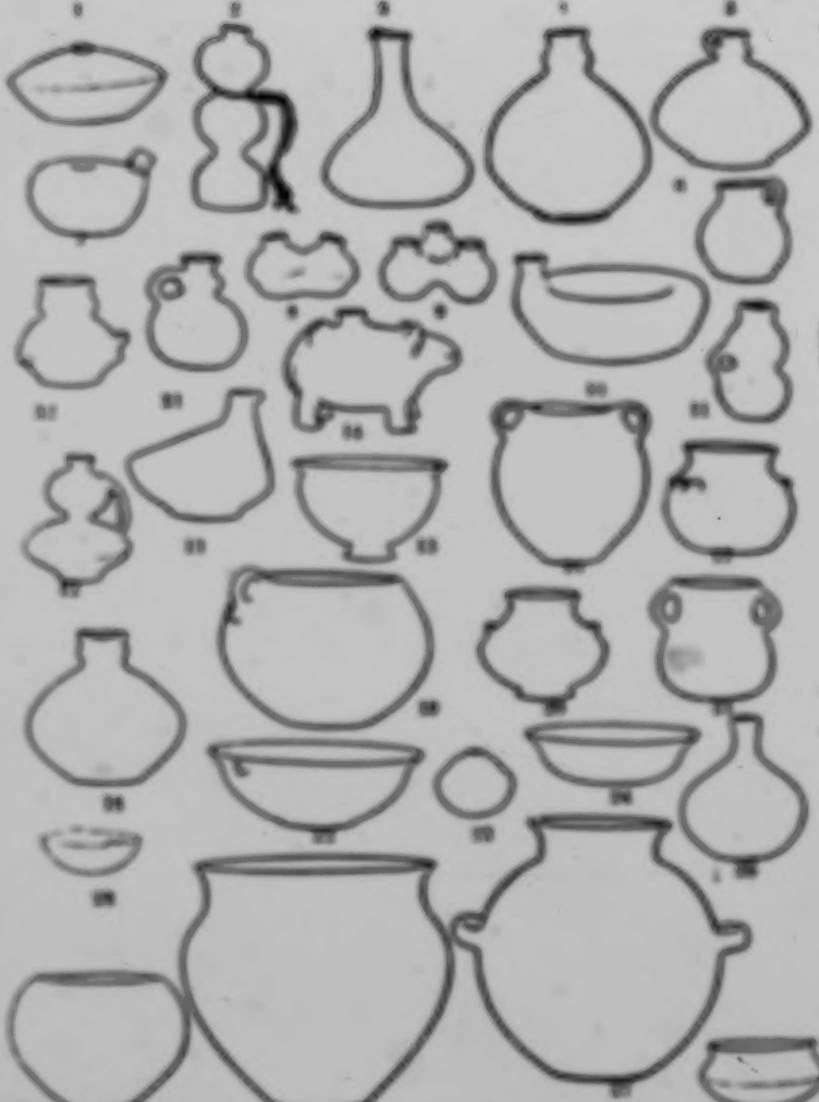


Fig. 91. Vessels of different shapes from the Chiriguano. Only variations in shape are depicted. Ornamentation not depicted. $^1/_8$

415 Fig. 41.

1. R. M. H. 106. Pitcher for serving maize-beer.
2. » » » 99. » » » » »
3. » » » 102. » » » » »
4. » » » 100. » » » » »
5. » » » 96. » » » » »
6. In private Collection. Cooking-pot.
7. R. M.H. 81. »
8. » » » 83. »
9. » » » 88. »
10. » » » 82. »
11. » » » 131. Bowl.
12. » » » 93. Pot.
13. » » » 148. Bowl.
14. » » » 89. Water-pitcher.
15. » » » 136. Maize-beer pitcher, also used as water pitcher.
16. » » » 137. Water-pitcher.
17. » » » 135. Vessel for maize-beer.
18. » » » 116. Bowl.
19. » » » 111. Vessel for maize-beer.
20. » » » 90. Pot.
21. » » » 112. »
22. » » » 113. Mug.
23. » » » 114. »
24. » » » 67. Vessel for maize-beer.
25. » » » 123. Bowl.
26. » » » 104. Vessel for serving maize-beer.
27. » » » 73. » » » » »
28. » » » 98. » » » » »
29. » » » 122. Bowl.

[illegible] [illegible] (1900-1904, 1913) [illegible]
[illegible] Chiriguano
Chane [illegible]

415

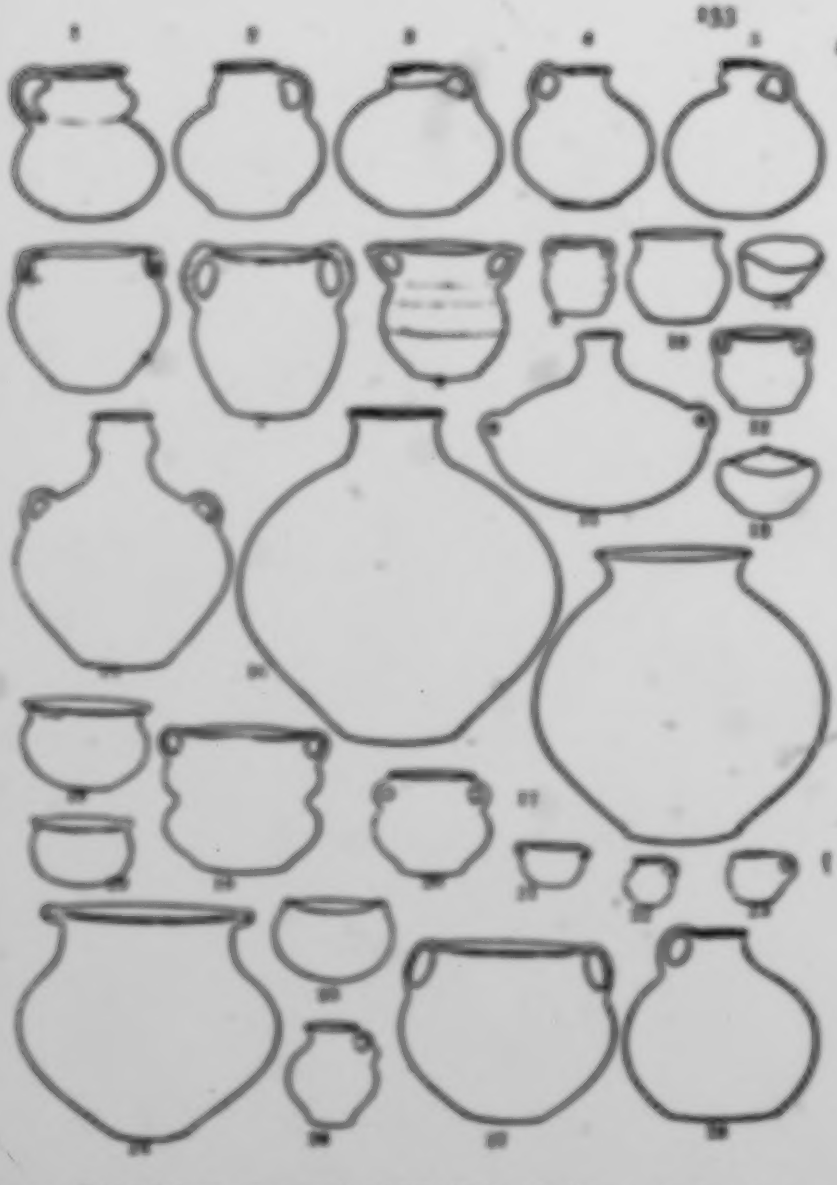


Fig. 41. Types of earthenware vessels of the Chané, Rio Itiyuro, showing the varying form of the pottery of this tribe. Only variations in shape are depicted. Ornamentation not depicted.

415 Fig. 43.

1.	R. M. H.	125.	Bowl to eat out of.
2.	" " "	134.	" " " " "
3.	" " "	126.	" " " " "
4.	" " "	128.	" " " " "
5.	" " "	138.	" " " " "
6.	" " "	153.	" " " " "
7.	" " "	136.	" " " " "
8.	In private collection.		" " " " "
9.	In private collection		" " " " "
10.	R. M. H.	170.	" " " " "
11.	" " "	154.	" " " " "
12.	" " "	144.	" " " " "
13.	In private collection.		Vessel for maize-beer.
14.	R. M. H.	75.	" " " " .
15.	" " "	132.	Bowl to eat out of.
16.	" " "	133.	" " " " "
17.	" " "	130.	" " " " "
18.	" " "	147.	" " " " "
19.	" " "	72.	Vessel for maize-beer.
20.	" " "	71.	" " " "
21.	" " "	87.	Brazier.
22.	" " "	168.	Bowl for steam-cooking.
23.	In private collection.		" to roast maize in.
24.	R. M. H.	147.	" to eat out of.

415

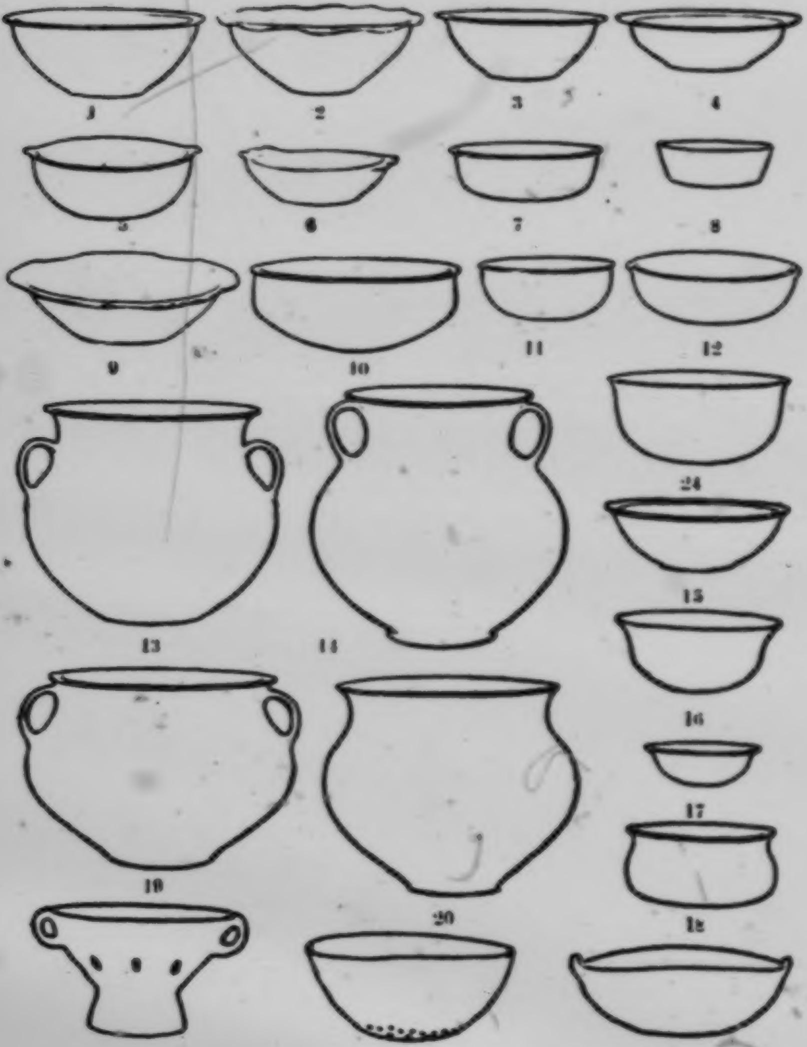

1
2
3
4
5
6
7
8
9
10
11
12
24
13
14
15
16
19
20
17
18
21
22
23

Fig. 43. Vessels of different shapes from the Chané, Rio Itiyuro, Argentine. Only variations in shape are depicted. Ornamentation not depicted. 1/8.

StNordenskiöld E-5,9(1908-1909, 1913) 1920
SF10 Chiriguano
Chane SF8

Rio Parapiti

415 Fig. 44.

1.	R. M. P.	339.	Vessel for maize-beer.
2.	" " "	342.	Pot.
3.	" " "	341.	"
4.	" " "	325.	Vessel for serving water or maize-beer.
5.	" " "	307.	Vessel for maize-beer.
6.	" " "	312.	" " " "
7.	" " "	332.	Small pitcher.
8.	" " "	304.	Bowl to eat out of.
9.	" " "	296.	" " " " "
10.	" " "	315.	Vessel for maize-beer.
11.	In private collection.		" " " "
12.	R. M. P.	300.	Bowl to eat out of.
13.	" " "	338.	Pitcher.
14.	" " "	329.	Pot.
15.	" " "	335.	Pitcher.
16.	" " "	303.	Bowl to eat out of.
17.	" " "	294.	" " " " "
18.	In private collection.		Vessel for serving maize-beer.
19.	R. M. P.	322.	Mug.
20.	" " "	324.	"
21.	" " "	323.	"
22.	" " "	326.	Bowl.
23.	" " "	320.	Shallow bowl on which to wind the spindle
24.	" " "	321.	" " " " " " " "
25.	" " "	310.	Vessel for maize-beer.
26.	" " "	328.	Bowl in which to keep salt etc.
27.	" " "	330.	Pot.
28.	" " "	327.	Bowl.
29.	" " "	334.	Pitcher.

Rio Parapiti

415

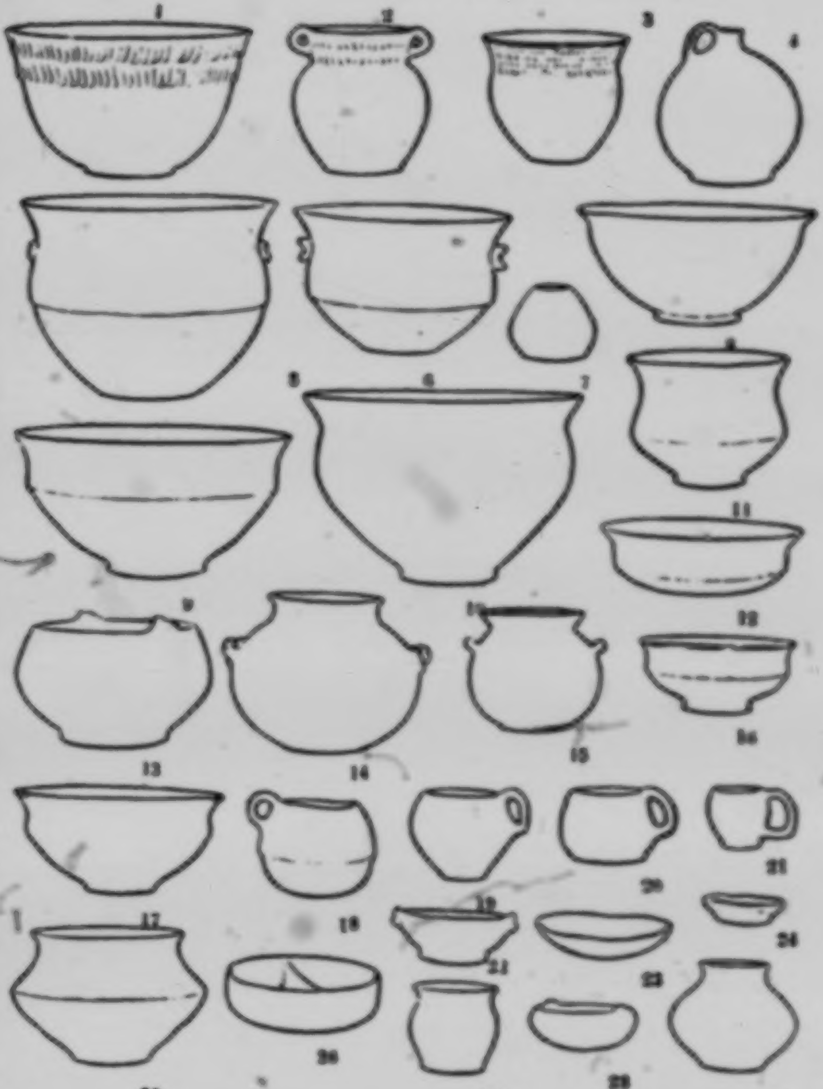
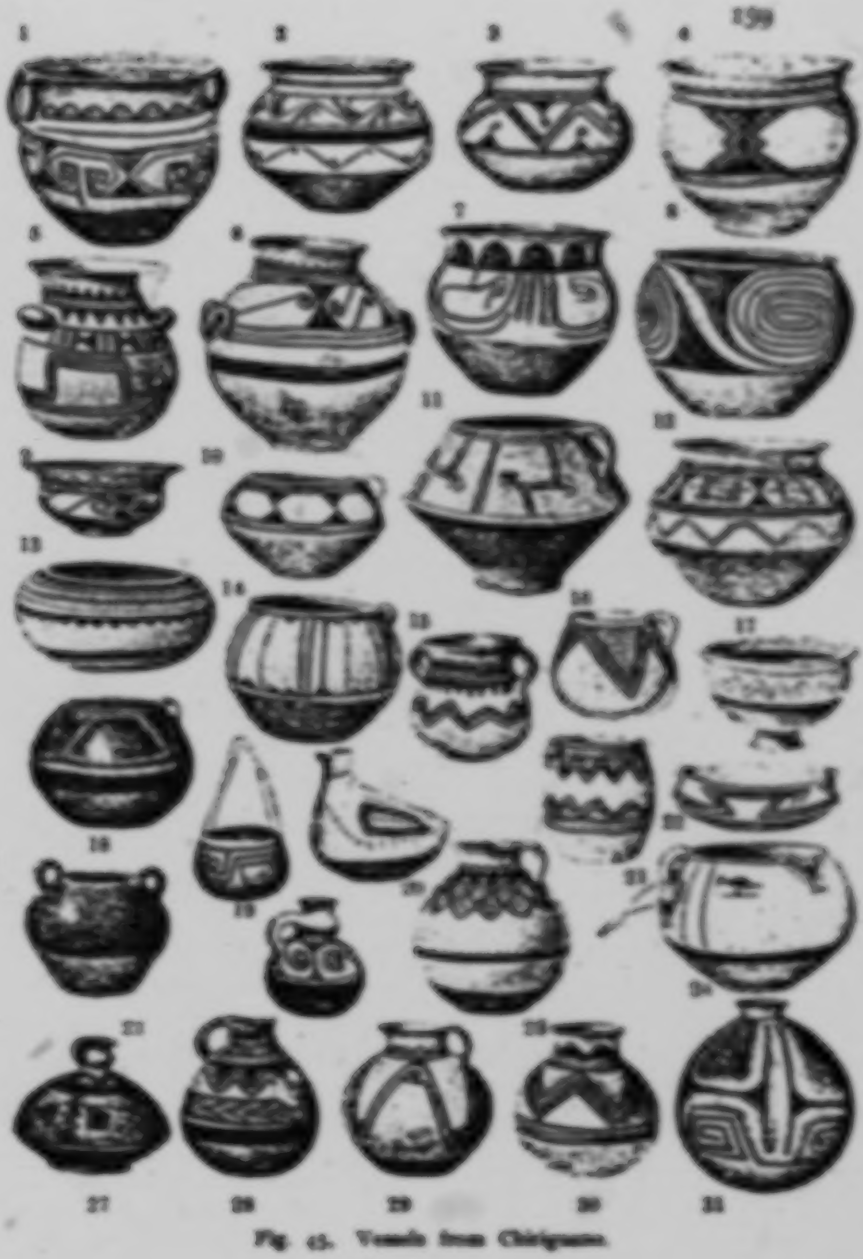

1
2
3
4
8
6
7
9
11
9
10
12
13
14
15
16
20
21
17
18
19
21
23
24
25
26
27
28
29

Fig. 44. Vessels of different shapes from the Chané. Rio Parapiti. Only variations in shape are depicted. Ornamentation not depicted. 1/8

Fig. 45.

415 1.	1/6	R. M. F.	945.	Yatavéri.	Vessel for maize-beer.
531 2.	»	» » »	1003.	Itapembia.	» » » »
3.	»	» » »	976.	Ñapeguana.	» » » »
4.	»	» » »	912.	Itatique.	» » » »
5.	»	» » »	914.	»	» » » »
6.	»	» » »	975.	Tihóipa.(?)	» » » »
7.	1/10	» » »	1025.	Yacuiba.	» » » »
8.	1/6	» » »	860.	S. Rosa.	» » » »
9.	»	In private collection.		Itatique.	Bowl to eat out of.
10.	1/10	R. M. F.	1032.	Ivu.	Vessel for maize-beer.
11.	1/6	» » »	926.	Itatique.	» » » »
12.	1/10	» » »	1001.	Itapembia.	» » » »
13.	1/6	» » »	921.	Itatique.	» » » »
14.	»	» » »	862.	S. Rosa.	» » » »
15.	»	» » »	737.	Caipipendi.	» » » »
16.	»	» » »	739.	»	Mug for drinking maize-beer.
17	»	» » »	770.	»	Bowl to eat out of.
18.	»	» » »	831.	Tihóipa.	Vessel for maize-beer.
19.	»	» » »	987.		For keeping knicknacks in.
20.	»	» » »	787.		Vessel for maize-beer.
21.	»	» » »	926.	Itatique.	Mug for drinking maize-beer?
22.	»	» » »	872.	S. Rosa.	Bowl to eat out of.
23.	»	In private collection.			Vessel for maize-beer
24.	»	R. M. F.	728.	Caipipendi.	Vessel for serving maize-beer.
25.	»	» » »	811.	Tihóipa.	» » » » »
26.	»	» » »	696.	Caipipendi.	» » » » »
27.	»	» » »	727.	Caipipendi.	» » » » »
28.	»	» » »	964.	Caipipendi.	» » » » »
29.	»	» » »	929.	Itatique.	» » » » »
30.	»	» » »	919.	Itatique.	» » » » »
31.	»	» » »	1005.	Itapembia.	» » » » »

465
53


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31

[53]
7

Fig. 45. Vessels from Chiriguano.

C
Ce

415
531
532

Fig. 46.

1.	1/8	R. M. H.	68.	Campo y Duran.	Vessel for maize-beer
2.	1/10	» » E.	1047.	Itapenbia.	» » » »
3.	»	» » E.	1049.	Caipipendi.	» » » »
4.	1/8	In private collection.		Campo y Duran.	» » » »
5.	1/10	R. M. H.	76.	Aquairenda.	» » » »
6.	1/8	» » H.	111.	Piquirenda.	» » » »
7.	»	» » F.	859.	S. Rosa.	» » » »
8.	1/10	In private collection.		Campo y Duran.	» » » »
9.	»	R. M. H.	155.	»	» » » »
10.		In private collection.			Water-pitcher.
11.	»	R. M. P.	329.		Pot.
12.	»	» » H.	89.	Piquirenda.	Water-pitcher.
13.	»	» » P.	337.		Vessel for maize-beer
14.	»	» » P.	313.		» » » »

c
Ce
415
531
532

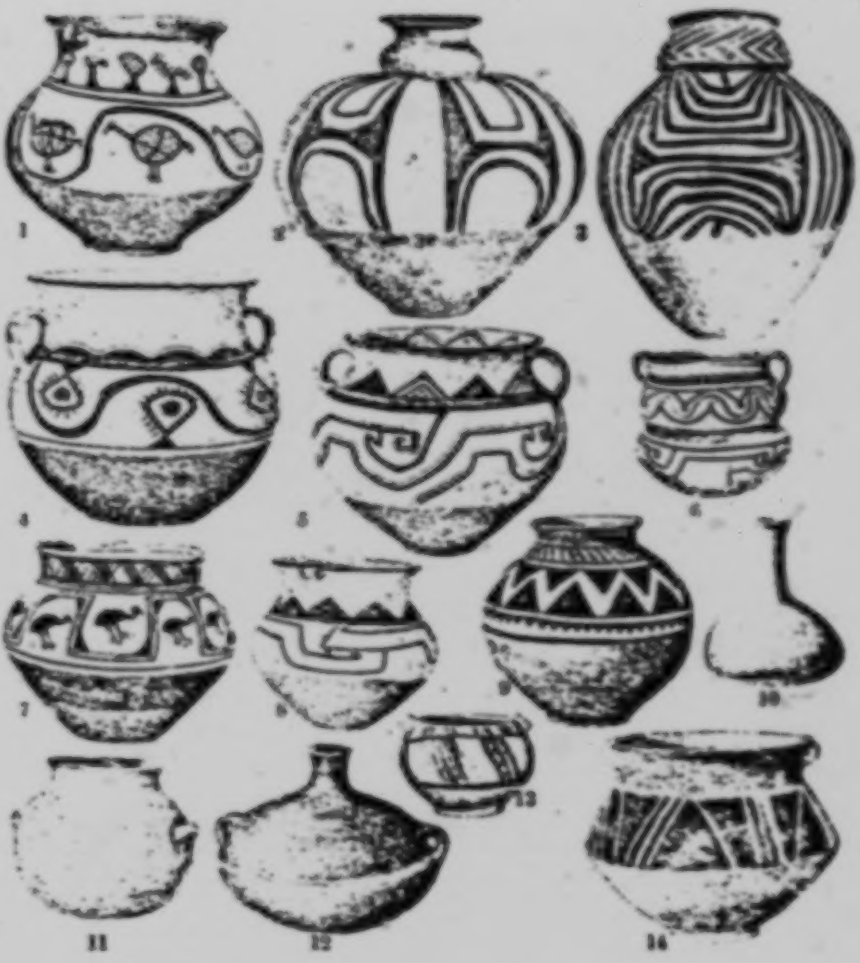

1
2
3
4
5
6
7
8
9
10
11
12
13
16

Fig. 46. Vessel from the Chiriguano and Chané.

E = Chiriguano. H = Chané, .Rio Itiyuro. P = Chané, Rio Parapiti.

Nordenskiöld E-(1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8

C
Ce
415
531
532

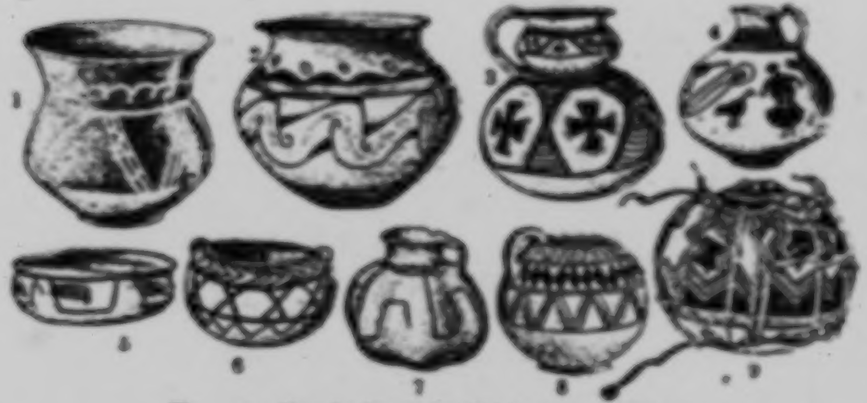


Fig. 47. Vessels from the Chiriguano and Chané.
H = Chané, Rio Itiyuro. E = Chiriguano.

1.	$^{3}/_{10}$	In private collection.	Chané, Rio Parapiti.	Vessel for maize-beer.
2.	$^{1}/_{8}$	» » »	Campo y Duran.	» » » »
3.	$^{1}/_{10}$	R. M. H. 106.	Campo y Duran.	» » » »
4.		In private collection.		» » » »
5.	»	» » »		Bowl to eat out of.
6.	»	R. M. H. 123.	Campo y Duran.	Bowl.
7.	$^{1}/_{6}$	» » E. 814.	Tihüipa.	Vessel for maize-beer.
8.	»	» » E. 942.	Itatique.	» » » »
9.	»	» » E. 960.	S. Antonio.	Vessel in which to carry maize-beer or water on expeditions.

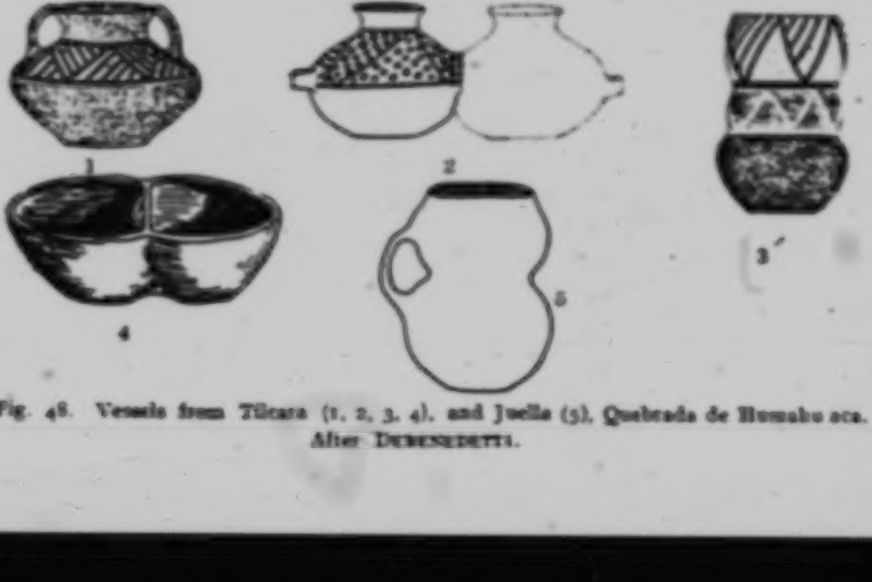
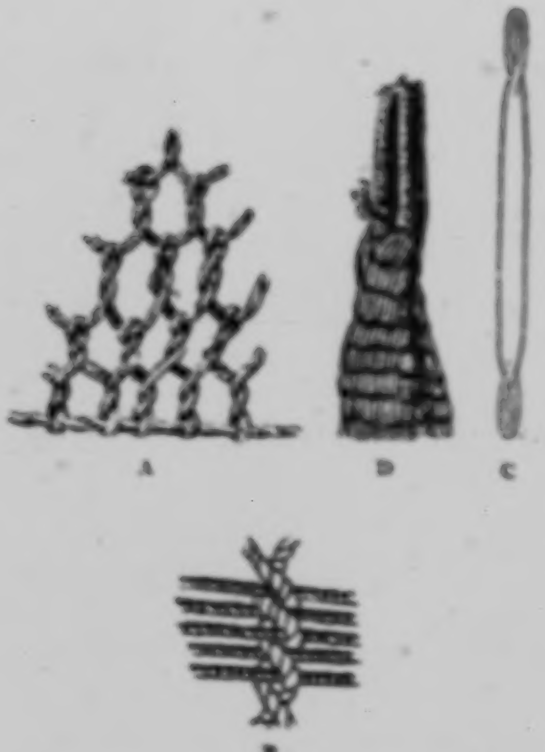


Fig. 48. Vessels from Tilcara (1, 2, 3, 4), and Juella (5), Quebrada de Humahuaca. After Debenedetti.

C
Ce
286
482



C
286
352

Fig. 49 A. Technique in a carrying-net. Chiriguano. R. M. E. 51. 1/3
B. Technique in the hammocks Chiriguano. R. M. E. 1056. 1/2.
C. Frontlet to a carrying-net. Chané. Rio Parapiti. R. M. P. 127.
D. Technique in C.

XXIII.

Various kinds of handicraft besides pottery.

Knitting-technique.

C Ce 286 Respecting the occurrence of different kinds of knitting technique among the Chiriguano and Chané I have little to add beyond what was mentioned in the English edition of Part I of this work.

C Ce 286 352 *171 The hammock-netting is the usual technique which gives the so-called barred hammocks (See Part I) which are widely distributed in all S. America north of El Gran Chaco. They are found almost universally where hammocks occur. Occasionally one sees among the Chiriguano and Chané bags knitted in the technique which in Part I I denoted by No 5. These bags are never made by themselves, but are obtained from the Mataco, Tapiete, or some other Chaco tribe. During my archaeological excavations at Igüembe I found a piece of pottery with impressions of knitting evidently done in this technique.

C Ce 284 286 293 The carrying-nets and most dip-nets of the Chiriguano and Chané are made with reef-knots. The Chiriguano have also dip-nets knitted with sheet-knots. For carrying-nets and dip-nets they Chiriguano and Chané generally use caraguatá bast. »Yuchan» is seldom used[1])

Spinning.

C Ce 283 Regarding the spinning of the Chiriguano and Chané there is little to add beyond what I mentioned in Part I.

---

[1]) *Chorisia insignis.*

Their spindles are of the Bakalri type with a knob. (See Part. I map 33). The spindle discs are sometimes of stone. The Chané at Rio Parapiti sometimes use when spinning a small earthen plate made for the purpose, on which the spindle is whirled.

C
Ce
283

The preparing of leather.

The Choroti and Ashluslay have no knowledge of tanning, whereas the Chiriguano, Chané, Toba and Tapiete have. They use the bark of Piptadenia and other trees.

These Indians have, in all likelihood, learnt the art of tanning from the Whites who, in these tracts, are more skilled in leatherwork than in any other trade. Tanning seems to be unknown to all Indians in S. America who are either untouched or but slightly influenced by White civilisation.

C
Ce
281
177
171*

The carving and ornamentation of calabashes.

The Chiriguano Indians, as well as the Chané make very great use of calabashes. They are used as receptacles for water and maize-beer; as boxes, humming-tops, bowls and, above all, as drinking-vessels. At festivals maize-beer is handed round in elaborately ornamented calabashes.

C
ce
415
322

Sometimes the calabashes are provided with lids. These are so made that lid and box are of the same fruit. Now and then star-shaped lids occurs. Lids with a shutting arrangement of the type shown in Fig. 50 A are characteristic of these Indians.

I published in Part I a map showing the distribution of calabashes with lids. From this map we see that these are probably a culture-element which the Indians east of the Andes received from the western area of civilization.

I scarcely think, at any rate, that the star-shaped lids can be cut out so as to fit tight on the box, save with a metal tool. It could hardly be done with a stone or bone implement.

C
Ce
531
*171

The Chiriguano and Chané calabashes are ornamented with engraved, burnt-in and painted figures. The distribution of engraved ornamentation cannot, at present be as certained. As I maintained in Part I, pyrograving seems to be a culture-element of western origin. The art of painting calabashes with urucu mixed with oil is unknown to the Choroti and Ashluslay, as also to the other Indians whom I got to know personally, with the exception of the Pauserna.

C
Ce
[415]

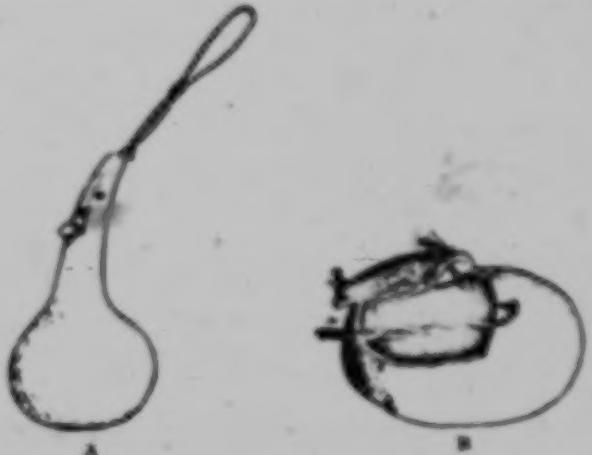


Fig. 30. A. Calabash with lid. Chané, Rio Parapiti. R. M. P. 35. 1/4
B. " " " Chiriguano. R. M. E: 508. 1/4

In the absence of sufficient comparative material from the Andine culture-area, I will not here seek to establish whence the Chiriguano and Chané got the ornamentation which adorns their calabashes, nor in what measure it has been independently elaborated by them. A calabash with engraved animal figures is reproduced here.

C
Ce
415
531
184

The Chané who dwell at Rio Parapiti have but little ornamentation on their calabashes, and that little is plain.

This contrasts with the Chiriguano and the Chané at Rio Itiyuro and is certainly owing to the poverty of the first-mentioned.

C
Ce
415
531
484

Sometimes the Chiriguano and Chané calabashes are surrounded by a net for greater convenience of carrying. I have already dealt with these in the foregoing.

C
Ce
415
482

The stoppers of calabash-bottles are generally pieces of empty corn-cobs. These are now and then used also as stoppers for earthen-vessels. The Choroti and Ashluslay, as a rule, make use of wax, which material is little used by the Chiriguano and Chané.

C
Ce
415
424
[251]
[171]

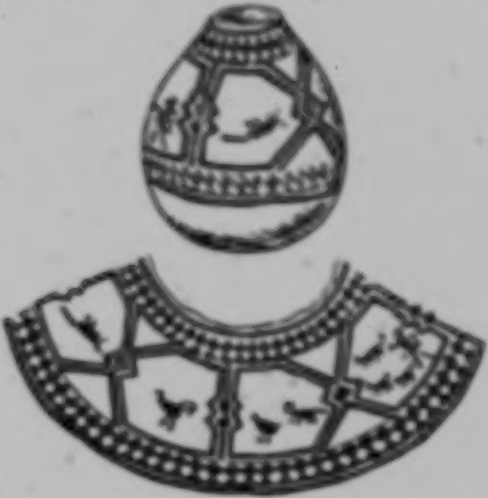


Fig. 51. Calabash. Chiriguano. R. M. 303. 1/3

C
415
531
532

Basket-work.

CE 265 171 In contrast to what is the case among the Choroti and Ashluslay, a good deal of basket-work is found among the Chiriguano and Chané, though less than among the tribes of N. E. Bolivia — this being due to the lack of suitable basket-making material.

There is unfortunately no complete work[1] on different types of baskets and different kinds of basket-technique embracing the whole of S. America. Such a work cannot

CE

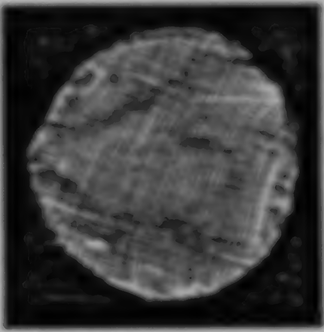


Fig. 50. Sieve. Chané, Rio Parapiti. G. M. F. 119. 1/4

be accomplished without access to a number of the great museum-collections. It is not, of course, from the Chaco nor, as a rule, from the west, that the Chiriguano and Chané received their basket-types and various kinds of basket-technique, but from the north. Baskets of grass, built up spirally, which seem to be very characteristic of the western area of civilization, are not found here at all[2] Neither the

---

[1] Mason had far too little material from S. America at his disposal.

[2] This technique, the so-called »Coiled basketry« has a much wider distribution than is indicated on Wissler's map. Very rarely one sees these baskets among the Mataco. They are very common at Arica on the coast of Chile.

169

Chiriguano nor Chané have carrying-baskets. They have carrying-nets instead.

In Part I I related how, in the year 1909, I came with some Guarayú Indians to the Chané and Chiriguano country. As there was no palm with paripinnate leaves, they were unable to make themselves new carrying-baskets instead of their old ones which were worn out. Should their tribe, for any reason, be compelled to emigrate to the Chiriguano and Chané country, they must alter their type of carrying-basket. It is quite possible that something similar has befallen the Chiriguano and Chané. They did not find suitable material for basket-making and so they learnt from the original inhabitants to make and use carrying-nets. Of the carrying-nets used by neighbouring tribes, those used by the Chiriguano and Chané most resemble those found among the Yuracare.

In N. E. Bolivia, where palms abound, the Indians often make baskets for occasional use of a single palm-leaf. The whole basket then consists of one palm-leaf. Max Schmidt has given a minute description of such baskets. They occur among the Chané on the lower Rio Parapiti and, more rarely, among the Chiriguano. It is, at present, impossible to define the distribution of such baskets, since the majority of explorers have paid them no attention. There is a considerable difference of make in different places. In my collections I possess such baskets from the Chimane, Itonama, Cavina, Huanyam, Ipurina, Pacaguara, Churapa, Yuracare, Siriono, Guarayú and Chacobo, as well as from the Chané and Chiriguano. It can be said that, practically speaking, they were used by all the Indians whose acquaintance I made on my travels excepting the Choroti, Ashluslay, Toba, Tapiete, Mataco, Quichua and Aymara.

The «Urupé» is a type of basket which I have already dealt with in the foregoing, and I beg to refer to what I said there.

D.

235
415

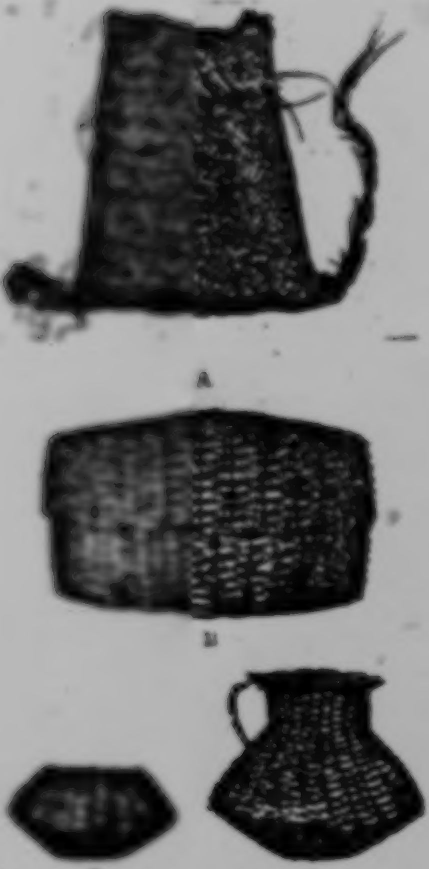


Fig. 10. Baskets, from the Chiriguano.

A = B. M. E. 885.
B = » » » 507.
C = » » » 174.
D = » » » 542.

A basket-making technique sometimes seen among the Chiriguano is the one reproduced in Fig. 54. Otherwise, I only know it from the Yuracáre and Ataiheaca. We are also acquainted with it from the Araucanians1), and from several tribes in N. W. Brazil.2) The Thulin-Liljewalch collection in the Gothenburg Museum has several baskets in this technique from Indians at Roraima in Guiana.

C
285
171*

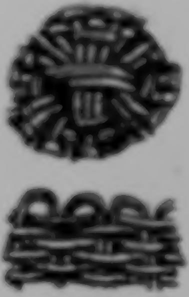


Fig. 54. The technique of a basket plaited like R. M. E. 07. 176. 248.

The Chiriguano and Chané (at Rio Parapiti) possess baskets with overlapping lids. This type of lid seems to have a northern extension in S. America. The baskets I have seen from the western area of civilization, are from excavations on the coast of Peru. They have lids which are opened like the lid of an ordinary cigar-box. The distribution of baskets with lids may be seen from the map 14 and from the table below. Such baskets are not mentioned by Max Schmidt from Guató, nor from the tribes on the upper Rio Xingú.

C
Ce
285
171*

---

1) Latcham (1) Plate XXXV.

2) Koch-Grünberg (2) Vol. 2, Fig. 142—143.

Table 23.

Baskets with lids. Map 24.

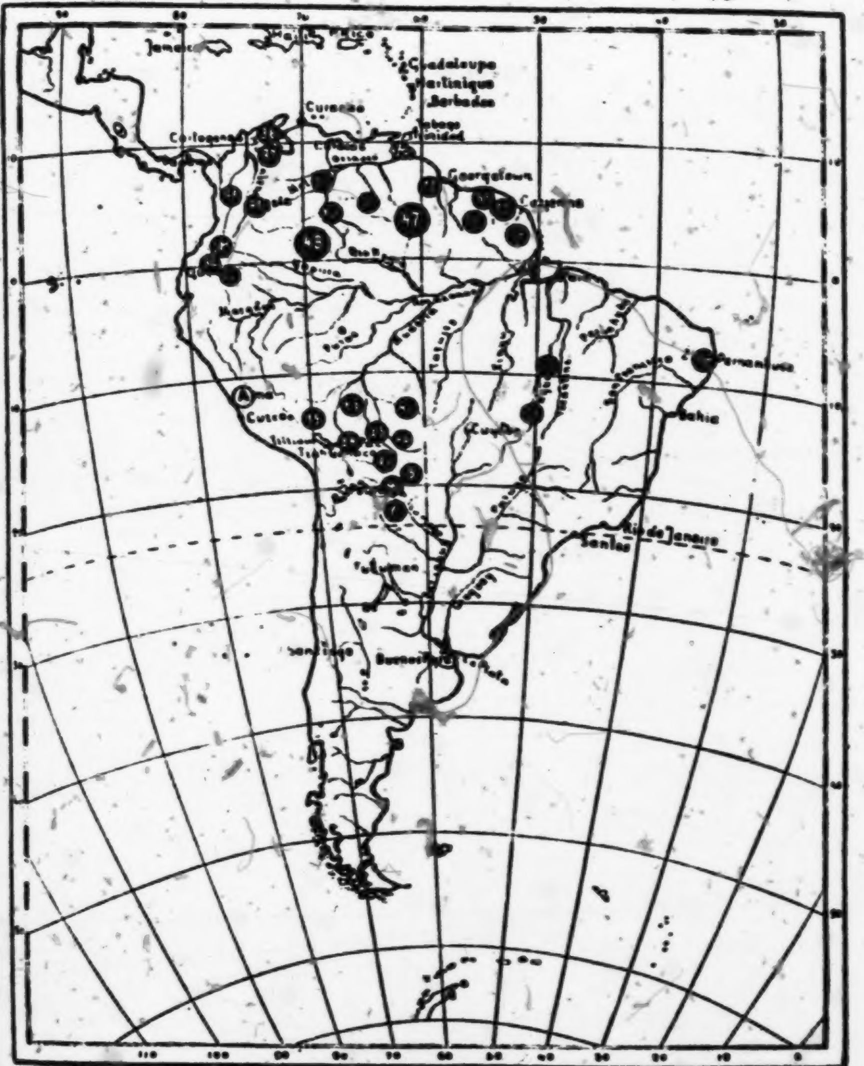
Baskets with overlapping lids.

C
Ce 4. Chiriguanos, R. M. E. 545. (numerous).
285 5. Chané, R. M. F. 208. (rare).
*171 6. Mataco, R. M. M. 434. (Only one).
13. Karajá, Krause Pl. 37. Fig. 16.
S 23. Yuracáre, G. M. 13. 1. 641.
102 24. Chimane, G. M. 15. 1. 1018.
285 25. Mojo.
31. Ojana, Trio, Goeje (1) Pl. VIII. Fig. 1, 3, 8.
32. Atsahuaca, R. M. 05. 16. 444.
36. Ijca. Bolinder (4)
37. Motilon, " (2)
38. Tupinamba, Lery P. 358.
40. Guarayus (Guarayú). R. M. G. 83.
41. Pauserna, G. M. 15. 1. 863.
47. Indians Roraima, G. M. 12. 1. 128.
48. Indians Northwestern Brazil. Koch-Grünberg (2). Vol. 1, Fig. 74. 174.
54. Guahivo, R. M. (H. M. K. II. 31.)
55. Caribs, Coast of Guiana, Stedman Vol. 2, P. 121; Barrere P. 138.
62. Chacobo, R. M. Ch. 112.
7 p. Oyampi, Crevaux P. 202.
7 S. Arawaks, Coast of Guiana.
8 F. Indians Bogota, Uhle (1) T. 2, Pl. 8.
9 F. Indians Andaqui, Uhle (1) T. 2, Pl. 8.
V5. Maquiritare, R. M. (H. M. K. I. 72).
5 M. Sebondoy, Pasto } Uhle (1) T. 2, Pl. 8.
3 I. Otavalo, Ecuador } Uhle (1) T. 2, Pl. 8.
3 I. Cayambe, Ecuador. M. C. (H. 1034, H. 1035).
2 I. Yumbo, Indians Rio Napo. Museum Stuttgart (L. 1455/10 a—b).

5:Nordenskiöld E-5 H (1908-1909. 1913) 1920
SF10 Chiriguano SF10
Chane SF8
South American Indians 53

173

C
Ce
285
171*
S
102
285


Jamaica
Guadeloupe
Martinique
Barbados
Curaçao
Tobago
Trinidad
Cartagena
Caracas
Georgetown
Cayenne
Bogota
Quito
Manaos
Pernambuco
Bahia
Cuyaba
Cuzco
Lima
Titicaca
Rio de Janeiro
Santos
Tucuman
Santiago
Buenos Aires
Montevideo
47
48
A

Map. 14. The distribution of baskets with lids.

● = Baskets with overlapping lids.
○ = Baskets with lids which are opened like an ordinary cigar-box.

C
ce
285
*171
S
182
285

X 3. Piaroa Rio Ventuari. Communication by letter from Prof. KOCH-GRÜNBERG.

Baskets with lids which are opened like an ordinary cigar-box.

A. Graves on the Peruvian Coast. G. M. Very commun in all collections of peruvian antiquities.

C
ce
285
531

Some baskets from the Chiriguano have shapes which make them look like imitations of earthen vessels. (Fig. 53 C and D) Sometimes they even have an ear. Chiriguano and Chané baskets are very seldom ornamented.

Metal-work.

C
325
301

The only metal-work now occurring here is that the Chiriguano sometimes make their tembetas (lip-buttons) of tin themselves. Whether the Chiriguano and Chané, before coming into contact with the Whites, themselves performed metal-work, I cannot say.

Stone-work.

C
ce
324

The Chiriguano and Chané do not now work stone.

Wood-work.

C
ce
322
412
177

For their wood-work the Chiriguano and Chané now use exclusively tools obtained from the Whites.

Weaving.

C
Ce
286

Among the Chiriguano I saw two types of loom; among the Chané only one.

The loom found among the Chiriguano and Chané is characterized by the completed product forming a ring (seamless) N. B. if so desired. The warp is set up as shown in the outline drawing. (Fig. 55.3) and in the sketch of a band-loom from the Chané. (Fig. 55.1). When the ring is

[text continues on p. 176]

C
Ce
286

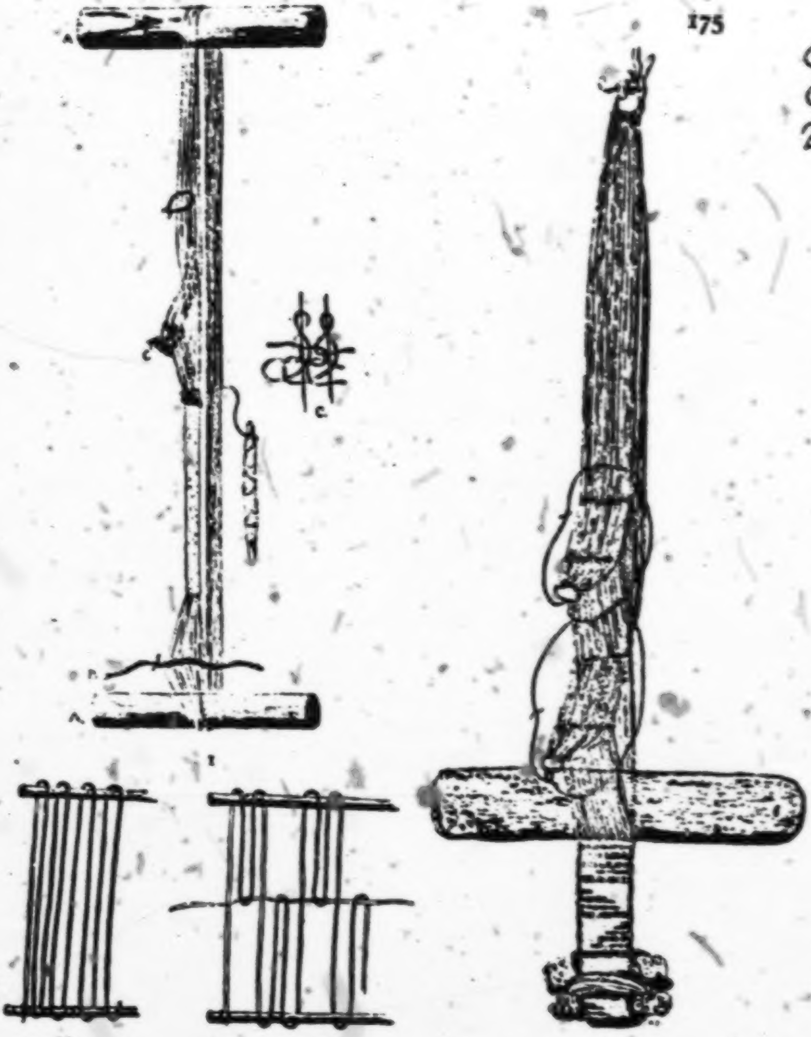


Fig. 55. 1. Sketch of a band-loom from the Chané. Rio Parapiti. R. M. P. 344. 1/8.
2. Outline drawing showing how the warp is set up in the looms from the Guarayú and many other tribes.
3. Outline drawing showing how the warp is set up in the loom fig. 55. 1.
4. Band-loom from the Chiriguano. G. M. 13. 1. 538. 1/4.

C
Ce
286

completed, it is opened by drawing out the string B, a piece of cloth being thus obtained which nowhere needs hemming. If the string B is allowed to remain and is woven into the cloth, the ring-shape is retained and it can also be used as a tipoy. (Fig. 22). This is a particularly ingenious way of setting up the warp. I have looms warped in this wise from the Chané, Chiriguano, Mataco, Yuracáre and Chacobo. In BOLINDER's collection there is a loom from the Ijca Indians on which the warp is also set up in this way. The string B is, however, replaced by a stick. There are also looms on which the warp is set up as depicted in the schematic illustration (Fig. 55.2) i. e. the completed work must be in the shape of a ring, unless the threads are cut off. I have looms warped thus from the Guarayú (Pauserna) and the Itonama Indians. Here belongs also the loom described by MAX SCHMIDT from Paressi-Kabiši, as also a loom from N. W. Brazil described by KOCH-GRÜNBERG.

C
Ce
286
*171

There are unfortunately too few descriptions of looms from the S. American Indians to render it possible to draw up satisfactory maps of the distribution of different types. The map 15 here appended is intended to show the distribution of looms on which the warp is set up in such wise that the completed work forms a ring, or can form one if it is desired. According to information kindly supplied by MAX SCHMIDT, there are no looms on which the warp is set up in such wise that the completed work is ring-shaped in the extensive collections from pre-Columbian Peru at the Museum of Ethnology in Berlin. When writing Part I of this work, I thought, like MAX SCHMIDT, that looms whose completed product is ring-shaped were an Arawak culture-element. In order to prove this, a larger material of looms is needed than has hitherto been collected. It is, however, likely that this kind of loom is now only found in northern S. America and, farther south, only east of the Andes. Looms warped so that the completed work must form a ring appear to have a more easterly distribution than those

C
Ce
286
171*

warped so that the completed work may form a ring or not according as it is desired.

Table 18.

»*Arawak*» *loom*. Map. 15.

C
Ce
102
286
171*
S
102
286

2. Ashluslay, Photo in my collection. G. M.
4. Chiriguano, R. M. E. 1037.
5. Chané, R. M. P. 344.
6. Mataco, R. M. M. 1230.
8. Lengua, GRUBB P. 67.
20. Paressi, MAX SCHMIDT (4) P. 214.
21. Cainguá, AMBROSETTI (7) P. 711.
22. Yuracáre, R. M. Y. 598.
31. Emerillon. GOEJE (1). Pl. XVI.
36. Ijca, BOLINDER (4) P. 149.
37. Motilon, BOLINDER (4) P. 149.
41. Pauserna, G. M. 15. 1. 806.
48. Indians Northwestern Brazil. KOCH-GRÜNBERG (2) Bd (2) P. 211.
62. Chacobo, R. M. Ch. 178.
65. Baure, R. M. C—B. 33.
IV. Tereno, MAX SCHMIDT (4) P. 214.[1]
1 C. Paez, PITTIER DE FABREGA Pl. VI.
2 M. Wapisiana, FARABEE Pl. VII.

C
Ce
286
171*

The loom only occurring among the Chiriguano is a band-loom which is depicted here, This loom is much more akin to the usual Peruvian loom and must be regarded as a western culture-element. (See fig. 55,4.) East of the Andes the Peruvian loom is unknown except among the Mataco.[2])

Appertaining to the loom outfit of the Chiriguano and Chané are weaving-implements of bone and wood (fig. 56).

---

[1]) Caduveï, BOGGIANI (2) P. 107. Warp set up as in the loom fig. 55, 1.

[2]) See Part 1. Fig. 62.

C
Ce
286
*171

Weaving-bodkins of bone are found among the Quichua. LEHMANN-NITSCHE depicts one from Puna de Jujuy[1] and I found one in an excavation at Ollachea,[2] Peru. COBO[3] mentions their use by the Incas.

C
Ce
286
531
Ce
[177]
C
797
871
531
286
177

The large fabrics woven by the Chiriguano and Chané are not adorned with figures. On the other hand, it is not rare to see ribbons with woven human figures and other ornaments (fig. 57). The Chané on the Rio Parapiti are said to have learnt these ornaments from a Quichua woman who had immigrated to these parts. The Chiriguano girls are never seen to wear the ornaments they have learnt to embroider at the mission schools. These are flowers and the like, generally European ones, which interest the Indians very little, and are too strange for their fancy. This does not prevent the work they do at the mission schools being excellently done. At the mission schools the Indian girls also sew and crochet lace. But they never make these things once they have left school.

C
Ce.
286

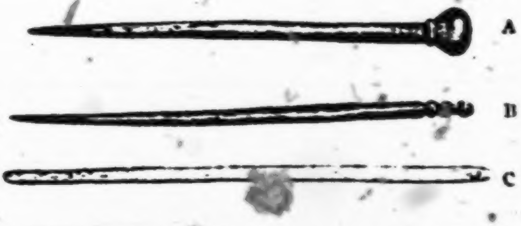


Fig. 56. Weaving-implement of wood. A and B from the Chiriguano. C from the Chané.

A = R. M. E. 48. 1/4. B = R. M. E. 146. 1/4. C = R. M. P. 21. 1/4.

---

[1] Pl. IV. C5.

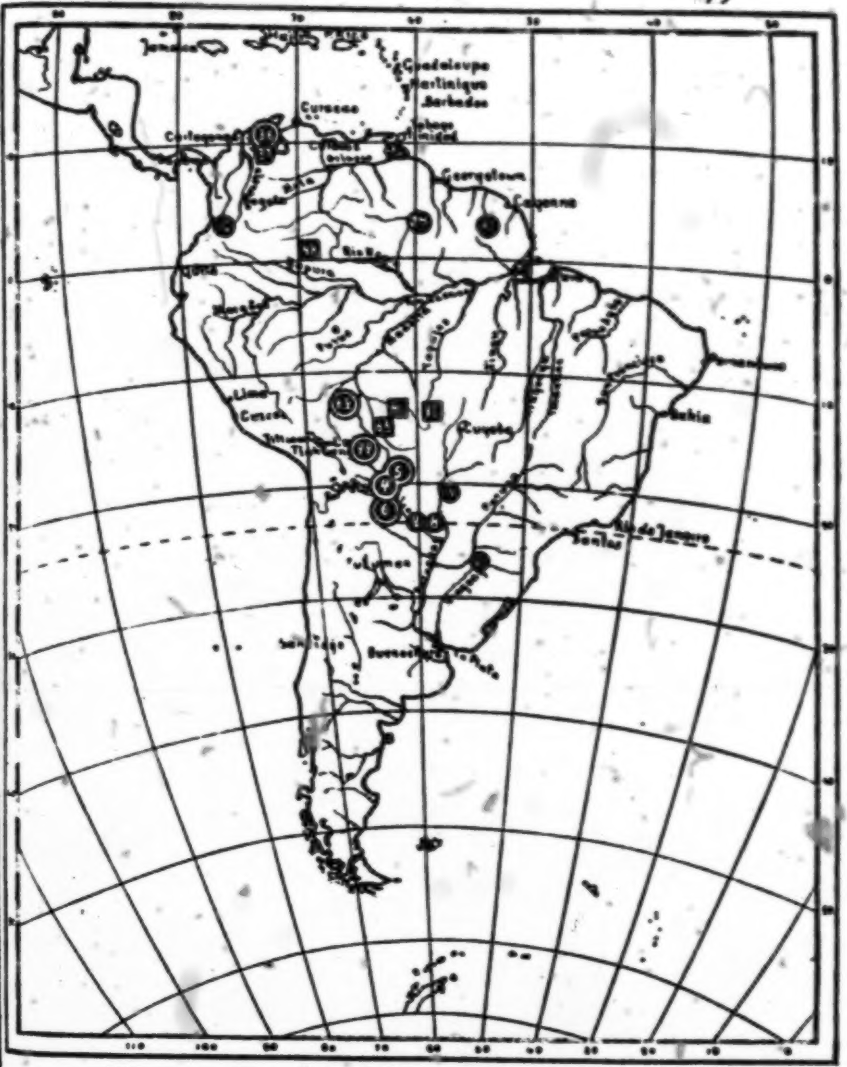
[2] (3) Pl. 3. Fig. 12.

[3] »Van apretando y tupiendo la tela con un hueso puntiagudo y liso« .... COBO T. 4, p. 204. COBO gives a description of the Peruvian loom. P. 203.

5:Nordenskiöld E-5,4(1908-1909. 1913) 1920
SF10 Chiriguano SF10
Chane SF8
South American Indians 53

c
ce
102
286
171*

S
102
286


Jamaica
Guadeloupe
Martinique
Barbados
Curaçao
Cartagena
Georgetown
Cayenne
Bogota
Lima
Cuzco
Titicaca
Cuyaba
Bahia
Pernambuco
Rio de Janeiro
Santos
Santiago
Buenos Aires

Map. 15. The distribution of the »Arawak» loom.

◉ = Warp set up as shown in fig. 55.1.
■ = » » » » » » » 55.2.
● = It is not exactly known how the warp is set up.

XXIV

Trophies.

C
Ce
727
[527]

We know from several writers[1]) that the Chiriguano used to keep the heads of their beaten enemies as trophies According to what a Chané Indian named Batirayu told me, the Chané used to bring home the heads of slain enemies. At festivals these were put up on the »square» in the villages. Thanks to FRIEDERICI we have a fine work on scalping in America to which I beg to refer. It is, at present, impossible to say whence the Chiriguano and Chané obtained this custom.

---

[1]) See PASTELLS P. 30; CORRADO P. 46.

XXV.

Property Marks.

C
Ce
423
177

In part 1 (Map 34) I have already written about the geografic distribution of such marks. They belong to the cultural elements that these Indians probably got from the culture zone in the west.

S:Nordenskiöld E-S,4 (1908-1909. 1913) 1920
SF10 Chiriguano
Chane SF8
Rio Parapiti

286
531

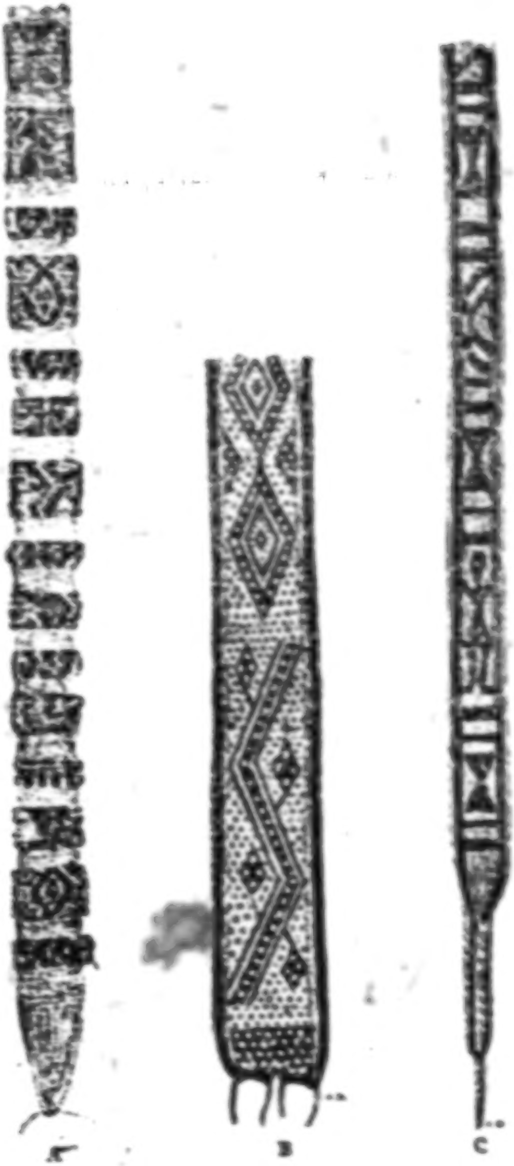


Fig. 57. Ribbons from the Chané, Rio Parapiti. 1/3.
A = R. M. P. 162. B = R. M. P. 134. C = R. M. P. 136

XXVI

Symbols of authority and dignity.

C
622 According to CORRADO[1]) the Chiriguano chief was
30: distinguished by a tuft of hair on his head the »yattira»
243 and earrings of green stones. At feasts the chief carried a
pole with a bunch of ostrich feathers at the end of it, the
»yandugua», and a carved stick the »iguïrape». I have
Ce only seen the »yandugua». Among the Chané I have seen
622 plain sticks that formed some kind of symbol of authority
for the chiefs.

C I have neither seen nor heard of any symbols of autho-
Ca rity among any other Indians than the Chané, Chirignano,
554 Quichua and Aymara, and also, at the missions, among the
171 Guarayos, Mosetene and Cavina. Among the Aymara and
Quichua the staff, usually silver mounted, is a symbol of
authority carried by Indian officials in the villages. It is
the same at the missions among the tribes mentioned and
C also among the Chiriguano. LOZANO[2]) states that the Spa-
[618] niards at the end of the seventeenth century solemnly pre-
sented a staff to a Chiriguano chief, Cambichuri, as a sym-
bol of authority. CREVAUX[3]) relates from his visit to the
Oyampi that the chief carried a staff in his hand, for all
over Guiana the staff is »le signe de commandement».
KOCH-GRÜNBERG[4]) speaks of the staff as a symbol of authority for chiefs in northwest Brazil. GILIJ[5]) says that the

---

[1] P. 45.
[2] P. 298.
[3] P. 164.
[4] (II) I P. 260, Fig. 142; P. 297, Fig. 175.
[5] T. 2 P. 195.

C
Ce
554
171*

staff was introduced at the missionary stations as a symbol of authority for chiefs. In the same way white men had introduced the staff as a symbol of authority among the Araucanians.[1] The half civilized Ijca[2] use the staff as a symbol of authority for medicinemen.

According to Restrepo[3] the Chibcha chiefs had staffs of guayacán. Martius[4] tells us that the chief of the Tupi-Indians carried a tall staff »pocacaba». He also tells us that Pombal, in order to flatter conquered chiefs ordered Malacca canes with big knobs and tassels to be distributed among them. The Incas do not seem to have used the staff as a symbol of authority.

C
Ce
[177]

It is obvious from what I have said that the staff, as a symbol of authority, was introduced here by the Whites, while on the other hand the Chiriguano most likely got the »yandugua», from the Incas. One of the Inca symbols of authority was a parasol of ostrich-feathers. Thus Betanzos[5] [6] tells us about Inca Urco, a son of Viracocha that he was borne in a litter on the shoulders of chiefs. When he went into the market-square, he sat on a golden stool and had a parasol made of ostrich-feathers dyed red.

Dr. Max Uhle has been kind enough to inform me that he possesses a japanned wooden drinking-cup, possibly from Carabuco near Lago Titicaca. It dates from the period of conquest. On the cup is depicted an Inca with all his tokens of honour, down to the parasol.

---

[1] Guevara, P. 27.

[2] Bolinder (4), P. 215.

[3] P. 99.

[4] (1), P. 64.

[5] P. 34.

[6] See also Markham P. 292.

XXVII.

Urn-Burial.

C Ce 764

The Chiriguano and Chané bury their dead in urns. The geographical distribution of interment in urns has been treated by several authors, particularly by PREUSS, BOMAN, OUTES, TORRES and PATER SCHMIDT. We can distinguish between two different methods of urn-burial in America. In one case the whole body has been stuffed into the urn, in the second the urn was only used for after-interment of the fleshless, and not unfrequently, painted bones. This secondary burial of the bones naturally requires smaller urns than those needed when the whole body is put into them. In some places children have been deposited in urns and adults in another manner.

C Ce 764 765 *171

It is natural that the conceptions on which direct or secondary urn-burial are based must be very different. The secondary burial of the bones in baskets instead of urns is of course more in conformity with this latter mortuary custom than immediate burying in urns. Secondary interment in baskets and in urns can also occur in the same cemetery. The basket is a substitute for the urn or vice versa[1]).

The essential thing in the secondary burial of the bones is their preservation which is considered most important. The direct interment in urns resembles burial in stone vaults and the like. The whole body is to be preserved, not only the bones. This should be kept in mind when we study the distribution of different kinds of urn-graves. EHRENREICH[2]) and above all BOMAN have assumed that urn-burial of adults is a Guarani custom. The latter supports this statement by the fact that this mode of burial is supposed to be very uncommon in the western zone of civilization and that it was chiefly used by the Guarani-Tupi tribes.

---

[1]) KARL V. D. STEINEN (3) P. 504.

[2]) (3).

C
Ce
764
765
171*

As this mode of burial is characteristic of the Indians I am treating of here, I will take up the question for closer examination and endeavour to make a map of the distribution of differents modes of urn-burial in S. America. Some finds of burial-urns, lately made by UHLE, makes the origin of direct urn-burial a subject which ought to be brought up for discussion again. I will here endeavour to show that direct urn-burial is chiefly an element of western culture, which most likely spread to the Tupi-Guarani tribes at a comparatively late period.

C
Ce
764
171*

The Tupi-Indians on the coast of Brazil had this form of burial. This was, however, not the commonest mode of interment there. Direct burial in the earth was more usual as pointed out by TORRES.[1])

LERY,[2]) YVES D'EVREUX,[3]) CLAUDE D'ABBEVILLE[4]) PERO DE MAGALHAES[5]) and NOBREGA[6]) only mention burial directly in the ground. Of these LERY is one of the greatest authors of the 16th century who has written about the Tupi-Indians on the coast of Brazil. THEVET,[7]) VASCONCELLOS,[8]) the author of *Principio e origem dos indios de Brasil,*[9]) and (MANOEL TRISTA)7) mention urn-burial. The first two also speak of other methods of burial. SOARES DE SOUZA, who has given such an exellent description of the customs and habits of the Indians on the Brazilian coast describes in detail the Tupinambá-Indians' mode of burial. According to him grown up people are buried in underground vaults and only the children of the chiefs in urns. For the chiefs they apparently dug good-sized underground vaults where the remains were protected from pressure or contact with the earth.8)

---

[1]) (2) P. 400.

[2]) P. 384. »Apres que la fosse aura esté faite, non pas longue à nostre mode, ains ronde et profonde comme un grand tonneau à tenir le vin, le corps qui aussi incontinent apres estre expiré, aura esté plié, les bras et les iambes liez à l'entour, sera ainsi enterré presques tout debout:»

[3]) P. 126.

[4]) P. 329.

[5]) P. 210.

[6]) P. 93.

[7]) P. 219.

[8]) P. LXXXIII.

[9]) P. 105.

Thus the Tupi-Indians on the coast of Brazil buried their dead in dug-out vaults or in great urns. As I have already pointed out the difference between these modes of interment is not very great. In the vault, and still more so in the urn, the body was protected from the earth. It is told of the Quichua that after the Roman Catholic priests had introduced burial in the earth (without coffins) these Indians unearthed their dead in the cemeteries and took them to their own burial ground in order that the earth might not press upon them. Something similar is related by JARQUE9) from the Guarani-indians in Paraguay. That urn-burial is not practised by the Mundrucú and Apiacá, who are Guarani Indians, is a known fact. The Oyampi, and the Omagua other Guarani tribes, practises secondary urn-burial.

RUIZ DE MONTOYA mentions urn-burial among the

[text continues on p. 188]

---

7) P. 1093.

8) P. 307: »e tem-lhe feito na mesma casa e lanço onde elle vivia, uma cova muito funda e grande, com sua estacada por de redor, para que tenha a terra que não caia sobre o difunto, e armam-lhe sua rede em baixo de maneira que não toquê o morto no chão; and P. 308: »E quando morre algum moço, filho de algum principal, que não tem muita idade, metem-no em cocoras, atados os joelhos com a barriga, em um pote em que elle caiba, e enterram o pote na mesma casa debaixo do chão.«

9) T. 3, P. 82.

Nordenskiöld E-1,7 (1908-1909, 1913) 1920

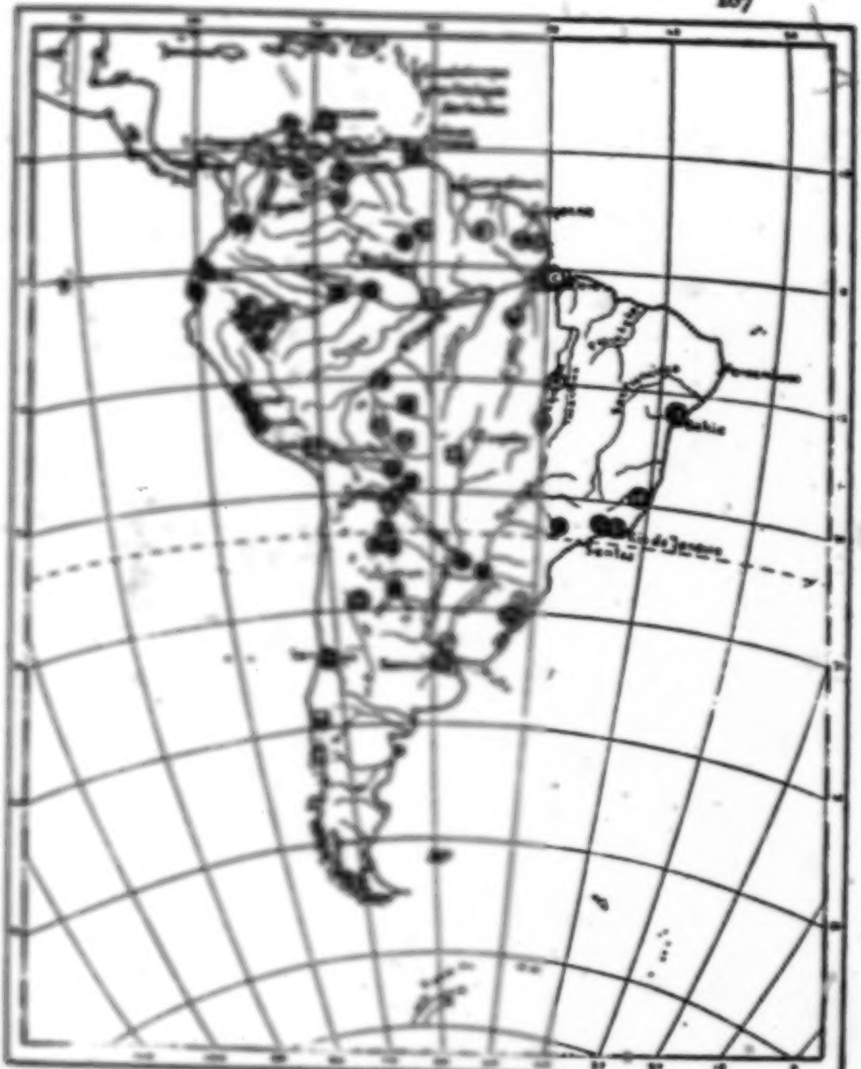
SF10 Chiriguano SF10

Chane SF8

South American Indians S3

C
Ce
764
765
171*

S
102
764
765



Map. 16. The distribution of urnburial in South-America.

● Primary urnburial. ○ — Secondary urnburial. ■ — Primary and secondary urnburial, or a combination of both occur. □ — Urnburial occurs. Unknown if it is primary or secondary urnburial.

C
Ce
764
*171

Guarani in Paraguay. According to TECHO[1]) the dead were deposited in the ground. Earthenware bowls were inverted over the faces of the dead. Direct urn-burial is the typical mode of interment among the Chiriguano and Chané.

Coming to the Andine culture zone we find that urn-burial of adults has had a very wide distribution. Urn-burials of this kind have been found in the Argentine at Carmen in Valle de Lerma, in the province of Salta, at San Pedro in the province of Jujuy, at Pampa Grande and other places and on the coast of Peru at Ica, Ancon and Cañete. At Ica urn-burials seem to have been quite usual. UHLE, who made a careful examination of them assigns them to the later Ica period[2]). UHLE has also found urn-burial at Ancon from the period previous to the Inca.

Urn-burial of adults also occurs in several places on the coast of Equador. This mortuary custom has also been usual at the Rio Ucayali and at the Upper Amazon where it occurs alternately with secondary urn-burial. A combination of these two different kinds of urn-burial was practised by at least two tribes the Cocama and Passé. The dead body as a whole was first deposited in a large eartheuware vessel and then when the flesh had decayed the bones were put in a smaller urn. Direct urn-burial seems to have reached some tribes near the Rio

---

[1]) »Believing the souls are buried with the bodies, cover the faces of the dead with concave dishes» P. 670 I regret not to have had the opportunity of verifying this quotation from the original Latin edition.

[2]) (4), P. 365. »Da hingegen sind die in der späteren Ica Zeit üblichen Bestattungen in Gestalt eiförmiger Mumienbündel, die in grosse irdene Töpfe gesetzt wurden, wohl als eine Fortbildung des ursprünglichen Proto-Nasca Typus zu betrachten. Erst die Inca brachten an der Küste wieder einen neuen Mumientypus auf, den man in Gräbern der mittelperuanischen Küste vielfach findet: regellos in allerhand Tücher eingeschlagene einfach gefaltete Körper.»

In a letter to me of the 17 September 1919 UHLE writes: »Natürlich gab es Unmassen von Urnengräber im Thale von Ica (letzte Zeit, zusammenfallend mit der incaischen.).»

C
C.E.
764
171+

Branco from the Upper Amazon River. It is not known if direct or secondary urn-burial was practised in the Cauca-Valley.

In northern Argentine in the region of the Diaguita it has been quite a usual custom to bury children in prettily painted urns, whereas grown up people were buried in the earth. As I have already pointed out urn-burial of adults has not been uncommon in the Argentine. At Pampa Grande Ambrosetti found face-urns containing skeletons of children above an urn with the skeleton of an adult. I used to incline to the belief that the last mentioned burial-urn belonged to an older cultural period than the infant burial-urns, because they were not found on the same level. This was most likely premature. Presumably all the burial-urns at this place are coeval, as Ambrosetti[1] assumes, in the same way as the skeleton found by Boman[2] at Arroyo del Medio is presumably coeval with the infant burial-urns which he found above it.

At Pampa Grande adults have most likely been placed deeper down in the earth than the children. The same rough earthenware used for the big urns has also been employed for some of the infant burial-urns.

Uhle[3] has endeavoured to make clear the relative ages of the cemeteries found in North Argentine and he comes to the conclusion, after having revised Ambrosetti's[4] archaeological work from La Paya, that burial-urns of the Santa Maria type or of a type related to it went out of use during the Inca period or perhaps before it.

He points out that Ambrosetti at Pampa Grande found no objects from the times of the Inca. So it is obvious that urn-burial began in a pre-Incan period both on the coast of Peru and in the Diaguita territory. *It follows from*

---

[1] (5) P. 80.

[2] P. 838.

[3] (1).

[4] (8).

C

CC *that I have said that it is not correct to describe urn-burial of*
764 *adults as typical of the Tupi-Guarani Indians in particular.*
771 *It is most likely a western cultural element which first spread* eastwards to the east coast of S. America and then was carried back from east to west by the Chiriguanos.

As has been already mentioned inhumation of adults in underground vaults as also in urns has been performed with the object of protecting the deceased from the weight of the earth. Interment in underground sepulchres has been extremely common throughout the whole of the western culture zone. Secondary burial of the bones in urns, baskets or some other receptacle must, as already mentioned, be based on quite a different conception. This mortuary custom as far as I know is not known from the western culture-zone.

The following table and map show the distribution of different kinds of urn-burial in S. America. On examining an urntomb it is not always easy to determine what kind of burial has been employed. Thus it has happened during my excavations that I have found urns in which the remains of the skeleton consisted of tiny fragments of bone. Some accounts of direct urn-burial of adults must probably be deemed very doubtful.

532

1a

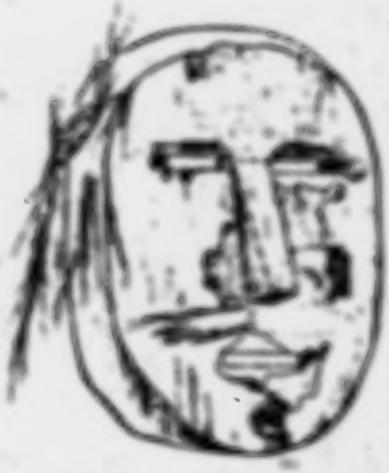


Fig. 43.* Dancing mask of wood, with imitation of the same material. Chiriguano. R. M. S. Coll. 1/3.

*[i.e., Fig. 76 of orig. text, p. 265]

E
Ce
764
*171
S
764
765

Table 19.

Urnburial in South America.

Number on the map.	Geographical distribution		Primary urn-burial.	Secondary urn-burial.	Only children buried in urns.	The face of the dead covered with concave dishes.	Literature
A.	Ancon; near Lima.	Peru.	✓				UHLE (4 b) P. 39; BERTHON P. 58.
A.	Ica.	•	✓				• (4) P. 363.
A.	Cañete.	•	✓				BOMAN P. 261.
AE.	Rio Dove.	Brazil.	✓ ?				EHRENREICH (4) P. 65.
AP.	La Rioja.	Argentina.	✓				AMEGHINO T. 1, P. 515.
E.	Chañar Yaco.	•	✓				LAFONE QUEVEDO (4).
E.	Carmen de Lerma, Salta	•	✓				BOMAN P. 255.
E.	Pampa Grande.	•	✓				AMBROSETTI (5).
E.	Prov. Salta.	•	✓				BOMAN P. 278.
E.	Santiago del Estero.	•	✓				• P. 278.
E.	San Pedro, Jujuy.	•	✓				• P. 259.
EA.	Guarayos.	Bolivia.	?	?			NORDENSKIÖLD (10).
EB.	Rio Guaporé.	Brazil.	?	?			• (11).
EC.	Ature.	Venezuela.		✓			PREUSS. P. 59; GILIJ T.2, P.107
ED.	Las Pavas and Santa Rosa.	Columbia.	?				• P. 131.
EE.	Esmeralda, Manabi and Guayas.	Ecuador.					RIVET AND VERNEAU P. 126, after GONZÁLES SUÁREZ; BUCHWALD P. 8.
EF.	Beetween Arequipa and Puno.	Peru.	?				PREUSS P. 61.
EH.	Llo-lleo.	Central-Chile.					OVARZUN (2) P. 14.

5:Nordenskiöld E-5,f(1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8
South American Indians S3

EP.	Rio Uruguay.			×			Torres (2) P. 402. Postcolombian. Bones painted.
ES.	Descalvado.	Matto-Grosso.		?			Waehneldt P. 214.
.M	Mounds, Mojos.	Bolivia.		×			Nordenskiöld (10).
N.	Upper Rio Paraná.		×				Mayntzhusen P. 468; Boman P. 268.
O.	The delta of Paraná.		×				Boman P. 269.
R.	Valencia.	Venezuela.		×	●		Marcano P. 10—11.
OV.	Xebero	Maynas.	×				[Maroni] P. 85.
OX.	Pauishana. Amaripa. Uajuru.	Rio Branco.	×				Martius (1) P. 635.[1]
2E.	Goytaca.	Rio Parahyba.	×				Boman P. 273.
3D.	Cocama.	Maynas.	×	×			[Maroni] P. 85.
4.	Chiriguano.	Bolivia.	×				
5.	Chané.	Bolivia. Argentina.	×				
6.	Mataco-Vejos.	» »	×				
6L.	Indians.	Rio Branco.		×			Martius (1) P. 636.
7L.	Indians near	Cartagena.		×			Oviedo T. II. P. 449.[2]
7P.	Oyampi, Palicurs.	French Guiana.		×			Boman P. 272.
8L.	Roamayna.	Maynas.		×			[Maroni] P. 85.
9X.	Passé.	Amazonas.	×	×			Roteiro da Viagem P. 50.
13.	Karajá.	Rio Araguaya.		×			Krause P. 330—331.
31.	Rucuyennes, (Ojana)	Guiana.		×			Crevaux P. 121.[3]

---

[1] »Rings um den an einen Pfosten befestigten todten Körper wird in geeignetem Abstand Feuer unterhalten; zwei Indianer sind immer beschäftigt, alle Feuchtigkeit an ihm zu entfernen und rücken die Feuer, deren Rauch durch verbrannte Tabakblätter und Harze vermehrt wird, immer näher, bis eine vollkommen dürre Mumie bereitet ist, die man sofort in einer thönernen Urne begräbt.«

[2] »é desque despiden los huessos, de la carne é quedan limpios embixanlos é meten los huessos é cabeças assi embixados en ollas é tinaxas é assi los guardan en casa o de fuera junto á la casa«. That is the oldest description of Urnburial known from S. America.

[3] The corpse is burnt and the ashes are preserved in a jar which is afterwards buried.

5:Nordenskiöld E-5,4(1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8
South American Indians 53

C
ce
764
171*
S
764
765

c
Ce
764
*171
s
764
765

Table 19.

Urnburial in South America.

Number on the map.	Geographical distribution		Primary urn-burial.	Secondary urn-burial.	Only children buried in urns.	The face of the dead covered with concave dishes.	Literature
38.	Tupinambá.	Brazil.	×		×•		Thevet P. 218; Purchas P. 1293.[1]); Vascóncellos P. LXXXIII; Principio e Origem P. 195; Soares de Souza P. 318.[2])
39.	Guajiro.	Columbia.		×			Candelier P. 210; Brettes P. 436.
42.	Caripuna.	Rio Madeira.		×?			Keller-Leusingir P. 104.
46.	Conibo.	Rio Ucayali.	×				St. Cricq P. 294.
68.	Omagua.	Maynas.		×			[Maroni] P. 85.
I.	Guarani.	Paraguay.	×				Montoya P. 52.
VO.	Jumana, Caiuxana.	Amazonas.	×				Martius (1) 482, P. 485.
Not on the map	Quimbaya.	Columbia.		×			Restrepo Tiradc P. 45.[3])
»	Cainguá.	Misiones.				×	Rengger P. 133.
»	Payaguá.	Rio Paraguay.				×	» P. 140; Azara (1) T. 2, P. 1 43.
»	Puna de Jujuy.	Argentina.			×		Eric von Rosen (4) P. 112.
»	Catamarca and other parts of Northern Argentina.				× •		Boman.
bd.	Northern Venezuela		×				Spinden P. 327.
be.	Prov. de Malleco and Cautin.	Southern Chile.	?				Guevara (1) P. 275.

South American Indians 53

bf.	Manaos.	Rio Amazonas.	?				Keller-Leuzinger P. 26; Martius (1) P. 440; Koch-Grünberg. Letter to the author.
c.	Marajo.	»		×			Netto.
d.	Counany.	Brazil.		×			Goeldi.
e.	Prov. Sara, Santa Cruz.	Bolivia.	×				Nordenskiöld (10).
l.	São Paulo.	Brazil.	×				Ihering (4) P. 31; Nehring P. 309.
p.	Island of Aruba.		×	×			Boman P. 274; Josselin de Jong.
s.	Rio Grande do Sul.	South Brazil.	× ?	×			Preuss P. 131; Boman P. 265; v. Ihering (1) P. 76.
Not on the map	Saipina.	Bolivia.			×		Nordenskiöld (11).
»	San Juan.	Argentina.			×		Debenedetti (4) P. 183.
ba	Sierra de Perijá.	Venezuela.	?				De Booy (2) P. 401.
Not on the map	Rio Yapurá.	Brazil.	?				Koch-Grünberg (2) T. 2, P. 313.
»	Tarupáyu.	Bolivia.				×	Nordenskiöld (11).
bc.	Xingú.	Brazil.		×			P. Schmidt P. 1075.

---

[1] A Treatise of Brasil, written by a Portugall which had long lived there. Purchas his pilgrimes. London 1625. »After he is dead they wash him and paint him verie bravely, as they paint their enemies: and after this they cover him with Cotton Yarne that nothing is seene of him, and put a covering over his face, and sitting they put him in a great tinnage or vessell that they have under the Earth for that purpose, and doe cover it in such manner that no Earth may come to him and the vessel they cover with earth, making him a house where everie day they carrie him meat.» The author probably *Manoel Trista* — on Emfermeiro do Colegio da Baya.

[2] The corpse is burnt and the ashes are preserved in a golden urn which is kept in a vault.

c
Ce
764
171*
S
764
765

Resumé.

C
Ce
121
177

In the foregoing pages I have attempted to analyse the material culture of the Chiriguano and Chané, and have tried to show from where they have derived the cultural elements existent among them. Finally I will see to what extent conclusions can be drawn from what has been said above, as to the changes the material culture of these Indian tribes has undergone under the influence of an entirely strange culture — that of the Whites — and of a kindred culture — that of the bronze age in the west. Furthermore, we will see what the Chiriguano and Chané have kept of the culture they had before they migrated to the districts they now inhabit, in what measure they have adapted themselves to their new natural surroundings, and what they presumably have learnt from their neighbours the Choroti, Toba, Mataco and Tapietę.

C
Ce
128
177

I have shown in tabular form the cultural elements the Chiriguano and Chané received from the Whites, those they received from the Mountain culture, and those that derive from the north and the east. This third table embraces such cultural elements as the Chiriguano and Chané took with them when they migrated to their present habitat. In the tables I have mentioned, as the reader will see, in the case of each cultural element whether its distribution in the region examined is favoured by natural surroundings, whether in its distribution it is in general independent of such surroundings, whether it is of great importance in the struggle for existence, whether its manufacture calls for technical skill, whether it is man's or woman's work, whether it is used by men or women or both, or only by children, whether it may be looked upon as still frequently used or as disappearing, and whether it can be regarded as a luxury or as a necessity. The tables thus reveal, for instance, whether these Indians have received chiefly articles of luxury from a certain source, whether what they received was mainly what women manufacture, and so forth.

C
Ce
128
177

Among the Chiriguano and Chané we naturally find a number of cultural elements with regard to whose origin we are quite ignorant. Without doubt many of these have a large distribution, but it is simply unknown. Others again have a distribution of such a nature that it yields us no conclusions regarding their origins. The Chiriguano and Chané have no cultural elements of any importance that are not known from one or several other Indian tribes. There are, of course, minor peculiarities in shape and ornamentation that characterize all the belongings of these Indians when compared with similar articles from other tribes, but I know of no striking invention of any description to the sole credit of these tribes

C
Ce
128
171*

A. *The influence of the Whites on the culture of Chiriguano and Chané*

The cultural elements the Chiriguano and Chané certainly or presumably derived from the Whites, are given in the table 20. It includes such elements as they manufacture themselves, but are indebted to the Whites for the idea; cultivated plants and domestic animals which were not introduced among them until post-Columbian times.

C
Ce
177

If we examine the table 20 we shall find that it embraces 31 cultural elements. It omits a few cultivated plants obtained by the Chiriguano and Chané from the Whites which are not, and never were, of any importance whatever, likewise a few domestic animals that are rarely seen. It includes three cultivated plants and four kinds of domestic animals. Of the remaining cultural elements, 17 are man's or boy's work, and only four woman's work. The majority

[text continues on p. 200]

C
Ce
105
177
462
511

Table 20.

Culture element that the Chiriguano and Chane presumably derived from the Whites.

+ Indicates occurrence. — Indicates absence.
/ Question not answered.

	Chiriguano.	Chané.	Distribution favoured by natural surroundings.	Distribution independent of natural surroundings	Of great importance in the struggle for existence.
Modern hut	+	+	+	—	+
Chair	+	+	/	+	—
Wooden boxes	+	—	/	+	—
Sugar-cane	+	+	+	—	—
Water-melon	+	+	+	—	—
Reeds for arrow-shafts (Arundo donax)	+	+	—	—	+
Pellet-bow	+	+	/	+	—
Cattle	+	+	+	—	+
Sheep	+	+	—	—	+
Horses	+	+	+	—	—
Poultry-keeping	+	+	+	—	+
Riding whip stock	+	+	/	+	—
Saddle	+	+	/	+	—
Tinder when striking fire with flint and steel	+	+	/	+	—
Clothes of tanned skin	+	—	+	—	—
Leather-girdle with pocket	+	+	/	—	—
Hairband with tassels	+	+	/	+	—
Strawhats	—	+	/	—	—
Women with pierced ears	+	+	/	+	—
»Boivéra»	+	+	/	+	—
Taba-game	+	+	/	+	—
Dice	+	+	/	+	—
»Rifle »(plaything)	+	+	/	+	—
Musical bow	—	+	/	+	—
Flutes with six carefully fitted holes	+	+	/	+	—
Trumpets of cow-horn	+	+	/	+	—
Trumpets with mouth-piece of reed	—	+	/	+	—
Vessels with lips in rims.	+	+	/	+	—
Brazier	+	+	/	+	—
Tanning	+	+	/	+	—
Staff	+	+	/	+	—

5tNordenskiöld E-5,4 (1908-1909, 1913) 1920

SF10 Chiriguano SF10

Chane SF8

Culture element that the Chiriguano and *Chané presumably derived from the Whites.*

+ Indicates occurrence. — Indicates absence

/ Question not answered.

C
Ce
105
177
462
511

Manufacture calls for technical skill.	Man's work.	Woman's work.	Used by men.	Used by women.	Used only by children.	Still frequently used.	Luxury.
+	+	+	+	+	—	+	—
+	+	—	+	+	—	+	—
+	+	—	+	+	—	—	—
/	/	/	+	+	—	+	—
/	/	/	+	+	—	+	—
/	/	/	+	—	—	+	—
+	+	—	+	—	—	+	—
/	/	/	+	+	—	+	—
/	/	/	—	+	—	—	—
/	/	/	+	—	—	—	—
/	/	/	—	+	—	+	—
—	+	—	+	—	—	—	+
—	+	—	+	—	—	—	—
—	?	?	+	—	—	—	—
+	+	—	+	—	—	—	—
+	+	—	+	—	—	+	+
+	—	+	—	+	—	—	+
+	+	—	+	—	—	—	+
—	/	/	—	+	—	+	+
+	/	/	+	—	—	—	+
—	+	—	+	—	—	+	+
—	?	?	+	—	—	—	+
—	—	—	—	—	+	—	+
—	+	—	—	—	+	—	+
+	+	—	+	—	—	+	+
—	+	—	+	—	—	+	+
—	+	—	+	—	—	+	+
—	—	+	+	+	—	—	+
+	—	+	+	+	—	—	+
+	+	—	+	—	—	—	—
+	+	—	+	—	—	—	+

C
Ce
177
[191]

are chiefly used by the men. It is clear that the latter learnt more from the Whites than the women, for they came into contact with them to a far greater extent. Hence many of the men, but few of the women, learnt to speak Spanish.

C
Ce
291
177

All the Chiriguano and Chané men now clothe themselves more or less like the Whites, that is to say in shirt and trousers. Few have coats. You rarely see anyone with boots, and never anyone with stockings. Practically all the Chiriguano and Chané women still wear the tipoy. It is usually made of cloth bought from the Whites. But in some villages the women still have a predominance of home-woven tipoys. The clothes worn by the men, and which are of the same cut as those of the Whites, are not their own make, but are obtained ready-made in exchange for manual labour. The cloth for the women's tipoys, too, which they make up themselves, is as a rule earned in similar wise by the men. The Indians now obtain the implements for all these things from the Whites.

C
Ce
241
177

The agriculture of the Chiriguano and Chané has been very little affected by the Whites. As the banana cannot be cultivated here with any success, the Indians have not been able appreciably to improve their conditions of life by extensive planting of the cultivated plants introduced by the Whites.

C
Ce
177
[233]

For some of the Chiriguano and Chané Indians, cattle-breeding has become of considerable importance.

Seventeen of the cultural elements included in the tables may be regarded as articles of luxury. These are games, musical instruments, etc.

The domestic industry of these Indians has been very little influenced in its development by the Whites, a fact on which I laid stress in speaking of their pottery, which has remained in a wonderful manner untouched by 400 years of intercourse with missionaries and others. I here repeat that even the instruction given in the mission schools in embroidery, lace-making and the like, has but very slightly affected the native domestic industry of the Indians. A handicraft the Chiriguano and Chané have learnt from the Whites, is tanning.

C
Ce
177

The dwelling-places of these two tribes have been greatly changed under the influence of the Whites. I have noticed the same phenomenon in several other tracts. The Yamaica, a small Peruvian tribe that I visited in 1904, a few years after its discovery, had already given up the old type of hut and built huts on the pattern of the houses of the Whites. The Huanyam, a small tribe near the Rio Guaporé in Brazil, which had not long been under the influence of the Whites (or more correctly, the negroes), now builds huts on the model of the houses they see at the rubber barracks. Several similar examples could be recorded. Everywhere it is the introduction of the white man's implements, so excellent in comparison with the stone axes, that has brought about the revolution.

C
Ce
177
342

The negative influence of the Whites has of course been very great here. The primitive tools have disappeared, a number of implements and ornaments have become rare or have vanished, a quantity of domestic industry has become superfluous, since readymade things have been purchasable from the Whites. The Indian domestic industry is gradually disappearing, but is not transformed under the influence of the Whites.

C
Ce
177

A race like the Chiriguano or Chané, when it falls under the influence of a culture, such as the Whites', which is very strange to them, very soon, as a rule, utilizes for its own ends such elements as smooth for them the struggle for existence. We know, for instance, with what incredible rapidity the culture of the banana spread among the Indians soon after the Discovery of America, and that in many places it rapidly became one of their most important cultivated plants. And I have already mentioned that, a few years after its introduction, poultry-keeping spread far and wide among the Indians in S. Brazil.

C
Ce
[301]

In the matter of ornaments and adornments the Indian

C
Ce is conservative, which may partly be connected with the
177 fact that for him, as KARSTEN has pointed out, colours and
301 ornaments have a great magical importance. When the
[439] Chiriguano and Chané obtain by barter glass-beads for their
[822] labrets, these must be blue, like the turquoises they were
wont to fasten in them.

C
Ce When they come across anything in the culture of the Whites that approximates to their own conception of the
177 ideal, the Indians have no difficulty in adapting it to their own use. We know that the dance mask is an Indian practice: it is therefore quite natural for the Indians to have embraced the carnival of the Whites with great interest and have added to it their own dances, in which they appear with masks on.

B. *The influence of the bronze age culture on that of the Chiriguano and Chané.*

C
Ce In the table 21 I have put together the cultural elements that the Chiriguano and Chané have very probably
[128] obtained from the culture zone in the west. We can see at a glance that this influence has been very considerable. The positive influence has been greater even than from the Whites.

If we look into the table we shall find that the Chiriguano and Chané have especially learnt from the culture zone in the west such things as are connected in some way with festivals. Here belong the men's festal attire, several adornments worn by men and women, the feather parasol, the finer sorts of pottery, the ornamentation of calabashes with pyrograving, several musical instruments, games, etc.
C
Ce When we know with what interest the Indians have embraced the festivals of the Catholic Church, wherever they
[797] have had an opportunity of doing so, it can easily be understood that the tribes that were neighbours of the Incas, also imitated their festivals.

C
Ce
177

The influence of the Mountain culture has extended considerably further east than the territory of the Chiriguano and Chané. In the *First Part* of this work I showed what a great influence this culture had on the Choroti, Ashluslay, Lengua, Mbayá, and other tribes. The Guarani-Tupí Indians in the most easterly part of S. America have even been influenced by it. The influence of the Mountain culture east of the Andes has probably been considerable not only under the Incas, but also at earlier epochs. But this is difficult to substantiate, with the paucity of distribution maps at present drawn up. I would ascribe to it certain cultural elements such as urn-burial and the shape of the labret among the Chiriguano. If this assumption is correct, these cultural elements must first have been conveyed eastward from the culture zone in the west, and then have been brought westward again by the migrations of the Chiriguano Indians. Both are here evidently original to Chiriguano and not to Chané.

The influence of the bronze age culture on tribes with a lower civilisation must have been quite different from that of the Whites. And yet the culture of the more highly civilised Indians consisted of the same elements as that of the more primitive Indians. The Chané and Chiriguano have therefore not only learnt the use of a number of things from the bronze age culture, but have also learnt to make them themselves. Among these more primitive Indians domestic industry has evidently progressed under the influence of the Mountain culture, but is perishing under the influence of the Whites.

C
Ce
177
174

As I pointed out in Part 1, the bronze age culture in the west was a great attraction for the Indians east of the Andes. It was in order to pillage the rich districts in the west that the Chiriguano migrated to these parts at the beginning of the 16th century. It must have been in order to facilitate the establishment of intercourse with the opulent culture of the bronze age that the Arawaks (i. e., the

[text continues on p. 206]

C
Ce
177
462
511
105

Table 21.

Cultural elements that the Chiriguano and Chané (presumably) obtained from the Culture Zone to the west.
+ Indicates occurrence. — Indicates absence.
/ Uncertain, not indicated.

	Chiriguano	Chané	[illegible]	[illegible]	[illegible]
Wooden hook on which to hang their belongings	+	+	/	+	—
Spade (Wooden)	+	+	/	+	—
Bird-net	+	—	+	—	—
Wooden bowl	+	+	/	+	—
Wooden spoon	+	+	/	+	—
Coca	+	—	—	—	—
Poncho-shirt	+	+	+	—	—
Sandal	+	+	+	—	—
Woven girdle	+	+	/	+	—
Frontlet	+	—	/	+	—
Wooden comb	+	—	/	+	—
Pincer	+	+	/	+	—
Tops	+	—	/	+	—
Necklaces of green stones	+	+	/	/	—
Headdress worn by Chiriguano Women on festive occasions	+	—	/	+	—
Vessels which are intended to be carried by a string running round the vessel	+	—	/	+	—
Chunquanti-game	+	+	/	+	—
Chuecarola- „	+	+	/	+	—
Quoits- „	+	—	/	—	—
Long wooden whistle	+	+	/	+	—
Rommel „ „	+	+	/	+	—
Drum	+	+	/	+	—
Vessels provided with ears or handles	+	+	/	—	—
Double pitchers	+	—	/	+	—
Water-pitchers	+	+	/	+	—
Pitchers with a bulging neck	+	+	/	+	—
Calabashes with lids	+	+	/	+	—
Calabashes with burnt in ornamentation	+	+	/	—	—
Peruvian loom	+	—	/	+	—
Bodkin of bone	+	+	/	+	—
Property marks	+	—	/	+	—
Yandugua the parasol of ostrich feathers	+	—	/	/	—

Cultural elements that the Chiriguano and Chané presumably obtained from the culture zone in the west.
+ indicates occurrence. — indicates absence.
/ Question not answered.

c
ce
177
462
511
105

Manufacture calls for technical skill	Man's work	Woman's work	Used by men	Used by women	Used only by children	Still frequently used	Luxury
—	+	—	+	+	—	+	—
+	+	—	+	—	—	—	—
+	+	—	+	—	—	—	—
+	+	—	+	+	—	+	—
+	+	+	+	+	—	+	—
/	/	/	+	—	—	/	+
+	+	+	+	—	—	—	+
+	+	+	+	+	—	+	—
+	—	+	+	—	—	+	—
+	—	+	+	—	—	—	+
+	+	—	+	+	—	+	—
—	+	—	+	—	—	+	+
+	+	—	—	+	—	—	+
—	/	/	+	+	—	—	+
+	—	+	+	+	—	—	+
+	—	+	—	+	—	—	—
—	+	—	+	—	—	+	+
—	+	—	+	—	—	+	+
—	+	—	—	—	+	—	+
+	+	—	+	—	—	—	+
+	+	—	+	—	—	—	+
+	+	—	+	—	—	+	+
+	—	+	+	+	—	+	—
+	—	+	+	+	—	—	+
+	—	+	+	+	—	+	—
+	—	+	+	+	—	+	+
+	+	—	+	+	—	—	—
+	+	—	+	+	—	+	+
+	—	+	—	+	—	+	—
—	/	/	—	+	—	/	—
—	/	/	+	+	—	/	+
+	/	/	+	—	—	—	+

C
CE
177
178

Chané) wandered south along the Andes to parts where no dense primeval forests hampered communications. This is always on the presumption that they were not forced southward by other tribes, which may possibly have been the case.

The question may naturally suggest itself, "How was it possible for the Chiriguanos, if they did not establish themselves in their present habitat until the beginning of the 16th century, to have learnt so much from the bronze age culture in the west, which began to decay a few years later?" They did not do so by direct intercourse with this culture, but learnt it from the original inhabitants of those districts, who were for a long time under the influence of that culture. The Chiriguano conquerors were presumably very few in number, compared with the original inhabitants, who most likely had long been under the influence of the bronze age culture. The conquerors adopted the culture of the original inhabitants, these the language of the conquerors.

The pottery of the Chiriguanos and Chané is evidently an offshoot of the Mountain culture, their textile industry has been strongly influenced by it. The most important domestic industries of these Indians are woman's work, and it is probable that kidnapped women have here been the intermediary agents of culture. When the Chiriguanos conquered the parts they now occupy, they did so, to a great extent at least, from the Chané.1) They then kidnapped a great number of women from these Indians. After being admitted into the tribe, the women taught their skill to their offspring. Being culturally much above their husbands, they would no doubt have a great influence on them.

C
[427]

---

1) See Nordenskiöld (1).

C. *Cultural Elements which the Chané and Chiriguano have got from the Mataco, Toba, and other tribes in the Gran Chaco.*

C
CE
177

The Chané and Chiriguano have presumably not learnt much from their neighbours the Choroti, Toba, Mataco, and Tapiete, whose chief domestic industry is the caraguatá work, in which they have developed an astonishing skill. As we saw in Part I of this work, they have various different kinds of knitting, sewing, and plaiting. The Chiriguano and Chané, on the other hand, do very little caraguatá work, and the technique of their knitting is without much variety. I consider it likely that they learnt from the Chaco Indians the use of the bowstring made of shreds of hide, landing-nets of the type used here, the wooden needle with the line for stringing fish, the skin rug, the forked wooden spit, the use of the resin of palo santo for painting earthen vessels, and possibly the bat and ball game.

It is clear that more civilized Indians like the Chiriguano and Chané, when they come in contact with more primitive Indians, like the Mataco, Tapiete, and Choroti, do not imitate their ornaments, clothes, etc. I have already pointed this out in Part I. We must bear in mind that the Mataco sometimes work as servants for the Chané, and the Tapiete for the Chiriguano.[1] These more cultured tribes would be more inclined to recognise the warlike Toba Indians as their likes.[2]

C
C.a.
[357]
[563]

---

[1] Among the Chiriguano (it does not exist among the Chané) it is characteristically only a boys' game, whereas among the less civilized tribes, the Mataco, Choroti etc., it is indulged in by grown-up men.

[2] Nordenskiöld (8).

D. *Northern and Eastern Cultural Elements that occur among the Chiriguano and Chané.*

C
Ce
177

The Chiriguano and Chané have a number of cultural elements that clearly reveal their connection with their kinsmen in northern and eastern S. America. The area of their distribution stretches like a wedge from the more tropical northern Bolivia between the Andes and El Gran Chaco proper. Several of these cultural elements, moreover, have a distribution that induces us to assume that they reached the region examined with the Arawaks, i. e. the Chané. One such is, for instance, the india-rubber ball game. Several of them, such as the hammock and the seat, were familiar to both Chiriguano and Chané before they migrated to their present habitat. These cultural elements that we may with more or less certainty assume to have been known to the Chiriguano or the Chané, or to both, at the time of their immigration, I have collocated in the table (*22*). Of course these Indians have several other cultural elements with a similar origin, though this cannot be proved from the material at our disposal.

C
Ce
177
178

In Table *22* there is scarcely any reference to clothing and adornments, owing to the fact that the Chiriguano and Chané have learnt much in this respect from the civilization of the bronze age and from the Whites. It is a characteristic trait for the Indian women to have clung to an older type of garment, — the tipoy.

Most of the cultural elements the Chané and Chiriguano have kept from the time of their migration to these parts, are useful articles, such as household furniture and fishing tackle. But some of these things are of minor importance here, since their existence is not necessitated by external conditions: they are evidently suited to other natural conditions than those that obtain in these parts.

C
Ce
177

One can conceive that several of the cultural elements included in Table *22* did not reach the Chané and Chiriguano until they had settled in their present territory, let us say by trade or other connections with the tribes living in N. E. Bolivia. I will not assert that this is impossible, but I am of opinion that it cannot apply to most of these cultural elements. In any case it does not apply to such cultural elements as rubber balls, certain kinds of basket work of palm-leaves, and hammocks, which clearly overstepped the natural confines as a result of emigration. The rubber for the balls must be procured from the north, and suitable palm-leaves for basket-work is not to be found locally. The hammock is not the kind of bed best suited to this part of the continent. C Ce 177

Mandioca is now cultivated only as a rarity by the Chiriguano and Chané. It is highly probable that, before they settled in their present habitat, this plant was of considerable importance to them. Neither the Chiriguano nor the Chané depended so largely on maize before they came to the parts they now inhabit. Here they have an excellent soil for growing maize. C Ce 177 241

Fish and game are now certainly of less importance to these Indians than they used to be. I mentioned earlier that the Chiriguano and Chané now make the impression of fishermen without water to fish in. A method of fishing which is of no little importance to the kinsmen of these Indians, is fishing with poison. In these parts it is rare, but occurs, at least among the Chiriguano. C Ce 177 226

»Chuchio» (*Gynerium* sp.) was formerly the plant that yielded at least the material for the arrows of the Chané Indians. As it has now been uprooted, its place is taken by another growth of grass, *Arundo donax*. It was not until post-Columbian times that this reed, which is used by the Chiriguano, Chané, and all the Chaco tribes for the shafts of their arrows and for other purposes, was introduced into S. America, where now, not least in El Gran Chaco, it has an exceedingly widespread distribution. (I ought to have pointed this out in the First Part of the pre- C Ce 177 824

[text continues on p. 212]

8:Nordenskiöld E-5/f(1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8

C
Ce
105
177
462
511

Table 22.

Northern and Eastern Elements that, occur among the Chiriguano and Chane.
+ Indicates occurrence. — Indicates absence.
/ Question not answered.

	Chiriguano.	Chané.	Distribution favoured by natural surroundings	Distribution independent of natural surroundings.	Of great importance in the struggle for existence.
Maize-barns on piles	+	+	—	—	+
Hammock used as a bed	+	+	—	—	—
Seat	+	+	/	+	—
Mandioca	+	+	—	—	—
Urucu	+	+	—	—	—
Bird arrows	+	+	/	+	—
» » (special type fig. 6 E.)	+	+	/	+	—
Snare fixed onto a long rod	—	+	/	+	—
Fish-spear	+	—	—	—	—
Multi-pointed fishing-arrows	+	—	—	—	—
Fishing with poison	+	—	—	—	—
Wooden mortar	+	+	/	—	+
Round-Sieve. »Urupe«	+	+	—	—	+
Great pot-spades of wood	+	+	/	+	+
Fire fans of plaited palm leaves	+	+	—	—	—
»Tipoy«	+	+	+	—	+
Rubber-balls	+	+	—	—	—
Souki-game	—	+	/	—	—
Panpipe	?	+	/	—	—
Game with maize-leaf balls	+	—	/	—	—
Vessels ornamented with finger-impressions	+	+	/	+	—
Bakaïri-spindle	+	+	/	+	+
Baskets made of a single palm-leaf	+	+	—	—	—
Baskets with overlapping lids	+	+	/	+	—
»Arawak« loom	+	+	/	+	+

Northern and Eastern Elements That occur among the Chiriguano and Chané.
+ Indicates occurrence. — Indicates absence.
/ Question not answered.

C
Ce
105
177
462
511

Manufacture calls for technical skill.	Man's work.	Woman's work.	Used by men.	Used by women.	Used only by children.	Still frequently used.	Luxury.
+	+	?	+	+	—	+	—
+	—	+	+	+	—	—	—
+	+	—	+	+	—	—	—
/	/	/	+	+	—	—	—
/	/	/	+	+	—	+	+
—	+	—	+	—	—	+	—
—	+	—	+	—	—	+	—
—	+	—	+	—	—	+	—
—	+	—	+	—	—	—	—
—	+	—	+	—	—	—	—
—	?	?	?	?	—	—	—
+	+	—	—	+	—	+	—
+	+	+	—	+	—	+	—
—	+	—	—	+	—	+	—
+	+	—	—	+	—	+	—
+	—	+		+	—	+	—
+	+	—	+	—	—	—	+
—	—	—	—	—	+	—	+
—	+	—	+	—	—	—	+
—	+	—	+	—	—	—	+
+	—	+	—	+	—	+	—
+	+	—	—	+	—	+	—
—	+	—	/	/	—	—	—
+	+	—	/	+	—	—	—
+	+	—	—	+	—	+	—

C
Ce
177
824

sent work.) It follows that these Indians used other material for their arrows in pre-Columbian days. The Choroti and Ashluslay probably had wooden shafts to their arrows, as Chuchio does not, and probably never did grow in their country. Before *Arundo donax* grew in the Chaco it must have been difficult in many places to find material for flutes, etc. Even in the country of the Chiriguano and Chané there were reeds only in certain parts, so that the introduction of *Arundo donax* may have been of importance for other things than the material for arrows.

C
Ce
177
285

The difficulty of getting suitable material for basket-making has resulted in the baskets being of less importance to the Indians of the district under examination than to the Arawaks and Guarani-tribes elsewhere. Presumably the Chiriguano and Chané used to have carrying-baskets, which were supplanted by carrying-nets of Caraguatá or Yuchan.

C
Ce
174

Pile-barns are probably a reminiscence from a time when the Chané lived in swampy parts.

[343]
[515]

I have already pointed out that the great cleanliness of the Chané and Chiriguano shows that they immigrated to their present habitat from warmer, well-watered parts.

C
Ce
177

There are not many cultural elements of which we can say with absolute certainty that they were brought by the Chiriguano, and not by the Chané. Such are, however, urn-burials and »tembeta» of the kind now in use. This is not precluded by the fact that these cultural elements were originally western. Finger-mark ornamention, the wooden mortar, and certain bird-arrows, spindles of the Bakaïri type with a little knob on the top of the stick, are also cultural elements with such a distribution that we can assume that they were originally more intimately connected with the Chiriguano than with the Chané. Further comparative investigations, and access to an extensive quantity of the necessary material will doubtless enable us, from a study of the minor details in the external form of

C
Ce
177

the various objects, to prove that some ideas are to be traced to the Chané, others to the Chiriguano.[1] For the purpose of such studies, we require access to the collections of all the great museums, and probably much more material.

There are of course among the Chiriguano and Chané many cultural elements of which we cannot say whence these Indians obtained them. These are such cultural elements of which the distribution is very imperfectly known, as well as some old ones whose distribution does not reveal from where they came originally. I do not cons[illegible] it worth while tabulating all these cultural elements specially. They are mentioned in the foregoing, though occasionally only *en passant*.

---

[1] This calls for a number of special studies of different cultural elements, such as Frödin's, and my own on the spindle.

Bibliography.

'C
Ce
113

d'Abbeuille (See Claude d'Abbeuille.)

Abreu, C., de. rã-txa hu-ni-ku-ĩ. Grammatica, textos e vocabulario Caxinauás. Rio de Janeiro 1914.

Acosta, Joseph, de. Historia natural y moral de las Indias. Madrid 1894. (Publicada en Sevilla 1590).

Acuña, Cristoval, de. A new discovery of the great river of the Amazons. (Expeditions into the valley of the Amazons. Translated and edited by Clements R. Markham. Hakluyt Society 1859). (First Ed. Madrid 1641).

(1) Aguado, Pedro, de. Historia de Santa Marta y nuevo reino de Granada. Madrid 1916—1917. (Written about 1575).

(2) — Historia de Venezuela. Madrid 1918—1919.

(1) Ambrosetti, J. B. Los indios Kaingángues. (Revista del Jardin Zoológico. T. 2. Buenos Aires 1894).

(2) — Notas de arqueologia Calchaqui. (Boletin del Instituto Geográfico Argentino. T. 17—20. Buenos Aires 1896—1899).

(5) — Exploraciones arqueológicas en la Pampa Grande. (Revista de la Universidad de Buenos Aires. T. 6. Buenos Aires 1906).

(6) — Exploraciones arqueológicas en la ciudad prehistórica de »La Paya». (Facultad de Filosofia y Letras. Publicaciones de la Sección Antropológica. N:o 3. 2:a Parte. Buenos Aires 1908).

(7) — Los indios Cainguá. (Boletin del Instituto Geográfico Argentino. T. 15. Buenos Aires 1895.)

(8) — Algunas alfaferias Calchaquies. (Revista Museo de la Plata. T. 3. La Plata 1892.)

Ameghino, Florentino. La antigüedad del hombre en el Plata. Paris y Buenos Aires 1880—1881.

C
ce
113

Andagoya, Pascual, de. The narrative of. London 1865. (Hakluyt Society. N:o 34.)

Annua de la Compañia de jesús, — Tucuman — Perú — 1596. (Relaciones geográficas de Indias. Perú. T. 2. Madrid 1885).

Annuæ Litteræ Societatis iesu. Anni 1605. Duaci 1618.

(2) (Armentia, Nicolas.) Descripción del Territorio de las Misiones Franciscanas de Apolobamba. La Paz 1905.

(1) Azara, Felix, de. Voyages dans l'Amérique méridionale. Paris 1809.

(2) — Geografia física y esférica de las provincias del Paraguay, y misiones Guaraníes. (Anales del Museo Nacional de Montevideo. Sección Histórico — Filosófica. T. I. Montevideo 1904). (Written 1790, edited by Rodolfo R. Schuller).

Baessler, Arthur. Altperuanische Metallgeräte. Berlin 1906.

Balboa, Miguel Cavello. Histoire du Pérou. Paris 1840. (Ternaux-Compans, relations etc. Serie II:4.) (Written 1576—1586).

Bandelier, Adolf F. The islands of Titicaca and Koati. New York 1910.

Barbosa Rodrigues, João. Relatorio sobre o Rio Capim. Rio de Janeiro 1875.

Barrere, Pierre. Nouvelle relation de la France equinoxiale. Paris 1743.

Bates, Henry Walter. The naturalist on the river Amazons. London 1910. (Popular edition.)

Bechamel (See Grillet.)

Benzoni, Girolamo. History of the New World. (Hakluyt Society N:o 21.) London 1857. (First edition Venice 1565).

Berthon, Paul. Étude sur le précolombien du Bas-Pérou. (Nouvelles archives des missions scientifiques. Paris 1910.)

5tNordenskiöld E-5,γ(1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8

C
Ce
113

Betánzos, Juan, de. Suma y narracion de los Incas. (Biblioteca Hispano-ultramarina. T. 5. Madrid 1880.) (Written 1551.).

Biet, Antoine. Voyage de la France equinoxinale en l'isle de Cayenne. Paris 1644.

Bleyer. Die wilden Waldindianer Santa Catharinas: die »Schokléng». (Zeitschrift für Ethnologie. Bd. 36. Berlin 1904).

(2) **Boggiani, Guido.** I Caduvei. Roma 1895.

(2) **Bolinder, Gustaf.** Einiges über die Motilon-Indianer der Sierra de Perijá. (Kolumbien, Südamerika). (Zeitschrift für Ethnologie. Jahrg. 49. Berlin 1917).

(4) — Ijca-indianernas kultur. Alingsås 1918.

Boman, Eric. Antiquités de la région andine de la République Argentine et du Désert d'Atacama. Paris 1908.

(2) **Booy, Theodor, de.** An exploration of the Sierra de Perijá. Venezuela. (Geographical Review. New York 1918).

Brett, W. H. The Indian tribes of Guiana. London 1868.

Brettes, J. de. Chez les Indians du Nord de la Colombie. (Le Tour du Monde. Paris 1898).

(1) **Bruch, Carlos.** (See Outes 5.)

Buchwald, Otto, von. Tolas ecuatorianas. (Physis. T. 3. Buenos Aires 1917.)

Burgos, Francois. État des missions ..... Chiquites. (Lettres édifiantes T. 8. Paris 1781.)

(1) **Campana, Domenico, Del.** Notizie intorno ai Ciriguani. (Archivio per l'antropologia e la etnologia. Vol. 32. Firenze 1902).

Candelier, H. Rio Hacha et les Indiens Goajires. Paris 1893.

Carvajal, Gaspar, de. Descubrimiento del Rio de las Amazonas. Sevilla 1894. (Edition José Toribio Medina). (Written 1541—1542).

Casas, Bartolomé, de las. Historia de las Indias. (Documentos inéditos para la historia de España. T. 62—66. Madrid 1875—76).

5tNordenskiöld E-5,4 (1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8

C
Ce
113

Castellanos, Juan, de. Elegias de Varones ilustres de Indias. Madrid 1850. (Biblioteca de Autores Españoles. T. 4.) (First Ed. Madrid 1589.)

Castelnau, Francis, de. Expédition, dans les parties centrales de l'Amérique du Sud. Histoire du Voyage T. 1—6. Paris 1850—1857.

Castillo, Joseph, de. Relacion de la provincia de Mojos. (Documentos para la historia geográfica de la República de Bolivia. T. I. La Paz 1906). (Edited by M. V. Ballivian). (Written about 1675.)

Castrucci, Guiseppe Emanuele. Viaggio da Lima ad algune tribù barbare del Perù. Genova 1854.

Caulin, Antonio. Historia coro-graphica natural y evangelica de la nueva Andalucia, provincias de Cumaná, Guyana y vertientes del Rio Orinoco. Madrid 1779.

Chantre y Herrera, P. Jose. Historia de las misiones de la compañia de Jesus en el Marañón español. (1637—1767). Madrid 1901.

Chervin, Arthur. Anthropologie Bolivienne. T. 1. Paris 1908.

Chomé, Ignace. Lettre du Père Ignace Chomé. (Lettres édifiantes et curieuses. Nouvelle édition. T. 8. Paris 1781).)

Church, Georg. Aborigenes of South America. London 1912.

(1) **Cieza de Leon, Pedro de.** The travels of .... 1532—50. London 1864. (Hakluyt Society. Vol. 33.)

(2) — Segunda parte de la crónica del Perú. (Biblioteca hispano-ultramarina. T. 5. Madrid 1880.)

Claude, d'Abbeuille. Histoire de la mission des Peres Capucin en l'Isle de Maragnan. Paris 1614.

Cobo, Bernabe. Historia del nuevo mundo. T. 4. Sevilla 1895. (Sociedad de bibliófilos andaluces).

(2) **Colini, G. A.** Gli Indiani dell' alto Amazzoni. (Bollettino della Societá Geografica Italiana. Vol. 21. Roma 1883).

C
Ce
113

Coll, C. van. Gegevens over Land en Volk van Suriname. (Bijdr. t. d. Taal-, Land-en Volkenk. v. Ned. Indië, 's-Gravenhage 1903.)

Comajuncosa (See Corrado.)

Cominges, Juan, de. Obras escogidas. Buenos Aires 1892.

Cooper; John, M. Analytical and critical bibliography of the Tribes of Tierra del Fuego and adjacent territory. Smithsonian Institution. (Bureau of American Ethnology. Bulletin 63. Washington 1917.)

Cornejo. (See Fernandez Cornejo.)

Corrado, Alejandro, M. y Comajuncosa, Antonio. El Colegio Franciscano de Tarija y sus misiones. Quaracchi 1884.

Costa Rubim, Braz da. Vocabulos indigenas e outros introduzidos no uzo vulgar. (Revista Trimensal. T. 45. Rio de Janeiro 1882.)

Coudreau, O. Voyage a la Mapuerá. Paris 1903.

Crevaux, J. Voyage dans l'Amérique du Sud. Paris 1883.

Cruz, Laureano, de la. Nuevo descubrimiento del Rio de Marañon (1651). Madrid 1900.

Dall, William, Healey. Masks, Labrets . . . . (Third annual report of the Bureau of Ethnology. Washington 1884.)

(2) Debenedetti, Salv. Exploracion arqueólogica en los cementerios prehistóricos de la isla de Tilcara. (Facultad de Filosofía y Letras. Publicaciones de la Sección Antropólogica N:o 6. Buenos Aires 1910).

4) — Investigaciones arqueológicas en los valles preandinos de la provincia de San Juan. (De la Revista de la Universidad de Buenos Aires. T. 32 and T. 34. Buenos Aires 1917).

(2) Deniker, J.. Les races et les peuples de la terre. Paris 1900.

Denis, Ferdinand. Des ornements de la lèvre inferieure (Le Magasin pittoresque. Paris 1850.)

Dobrizhoffer, Martin. An account of the Abipones. London 1822. (First Ed. in Latin Viennæ 1784).

C
Ce
113

Eder, Franc. Xav. Descriptio provinciæ Moxitarum in regno Peruano, Quam e scriptis posthumis Franc. Xav. Eder e Soc. Jesu annis XV. sacri apud eosdem Curionis digessit, expolivit & adnotatiunculis illustrativ Abb. & Consil. Reg. Mako. Budæ. 1791.

(2) Ehrenreich, Paul. Beiträge zur Völkerkunde Brasiliens. (Veröffentlichungen aus dem königlichen Museum für Völkerkunde. Bd. 2. Berlin 1891).

(4) — Reise auf dem Rio Doce. (Verhandlungen der Berliner Anthropologischen Gesellschaft. Berlin 1885.)

(5) — Die Ethnographie Südamerikas im Beginn des XX. Jahrhunderts. (Archiv für Anthropologie 1904.)

Encyclopædie van Nederlandsch West-Indië. 's Gravenhage and Leiden. 1914—1917.

Ernst, (A.) De l'emploi de la coca dans les pays septentrionaux de l'Amérique du Sud. (Congrès international des Américanistes 1888. Berlin 1890).

d'Escragnolle, Taunay Alfredo. Os' indios Kaingángs: (Revista do Museu Paulista. T. 10. São Paulo 1918).

(1) Evans, Oswald H. Notes on the Stone Age in Northern Chile, with special reference to Taltal. (Man. 1906.)

(2) — On Pottery fragments found at Taltal, Northern Chile. (Man. 1907).

d'Evreux. (See Yves d'Evreux).

Farabee, William, Curtis. The Central Arawaks. Philadelphia 1918.

Fauque, Lettre du Pere Fauque. Lettres édifiantes. T. 7. Paris 1781.

Federmann, Nicolas. Belle et agréable narration du premier Voyage. Paris 1837. (Voyages, relations etc. publie par H. Ternaux.) (First edition. Haguenau 1557).

Fernandez Cornejo, Adrian. Descubrimiento de un nuevo camino desde el valle de Centa hasta la villa de Tarija (Coleccion Angelis. T. 4. Buenos-Aires 1901—02. Segunda edicion.) (Written 1791).

5tNordenskiöld E-5/1(1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8

C
Ce
113

Fernandez, Juan Patricio. Relacion historial de las misiones de los Indios, que llaman Chiquitos. Madrid 1726.

Ferris, H. B. The Indians of Cuzco and the Apurimac. (Reprinted from the Memoirs of the American Anthropological Association. Vol. 3. Lancaster 1916).

Festa, E. Nel Darien e nell'Ecuador. Torino 1909.

Figueroa. Relacion de los misiones de la Compañia de Jesús en et pais de los Mainas. (Collección de libros Y documentos referentes á la historia de América. T. I. Madrid 1904.)

Florence, Hercules. Esboço da Viagem. (Revista trimensal. T. 38. Rio de Janeiro 1875.)

Freyreiss, G. W. Bidrag till kännedomen om Brasiliens urbefolkning. (Edited by C. A. M. Lindman). Ymer. Stockholm 1900. (Written 1815).

(1) Friederici, Georg. Skalpieren und ähnliche Kriegsgebräuche in Amerika. Braunschweig 1906.

(5) — Die Schiffahrt der Indianer. Stuttgart 1907.

Frödin, Otto and Nordenskiöld, Erland. Über Zwirnen und Spinnen bei den Indianern Südamerikas. (Göteborgs Kungl. Vetenskaps- och Vitterhetsamhälles Handlingar. Göteborg 1918).

Gallardo, Carlos R. Los Onas. Buenos Aires 1910.

Garcilasso de la Vega. Commentarios reales, que tratan del origen de los yncas. Lisboa 1609.

Gibbon, Lardner. Exploration of the valley of the Amazon. Washington 1854.

Giglioli, Enrico H. Maschere fatte colla parte facciale di crani umani. (Archivio per l'Antropologia, la Etnologia etc. Vol. 17. Firenze 1887.)

Gilij, Filippo Salvadore. Saggio di storia americana. T. 1—4. Roma 1780—1784.

(1) Goeje, C. H., de. Bijdrage tot de Ethnographie der Surinaamsche Indianen. (Supplement zu »Internationales Archiv für Ethnographie.» Bd. 17. Leiden 1906).

C
Ce
113

(2) — Beiträge zur Völkerkunde von Surinam. (Internationales Archiv für Ethnographie. Bd. 19. Leiden 1908).

Goeldi, Emilio A. Excavações archeologicas em 1895. Executadas pelo Museu Paraense no littoral da Guyana Braziliera entre Oyapock e Amazonas. (Memorias do Museu Paraense de Historia Natural e Ethnographia. Pará 1900).

Gomara, Francisco Lopez, de. Historia general de las Indias. Madrid 1877. (Biblioteca de autores españoles. T. 22. (First edition Caragoça 1552—1553).

Grandidier, Ernest. Voyage dans l'Amérique du Sud. Paris 1861.

Grillet, Jean et Bechamel, François. Journal du voyage....l'an 1674 in Relation de la riviere des Amazone traduite par Gomberville. T. 2. Paris 1782.

Grubb, Barbrooke W. An unknown people in an unknown land. London 1911.

(1) Guevara, Tomás. Psicolojia del Pueblo Araucano. Santiago de Chile 1908.

Gumilla, Joseph. El Orinoco ilustrado, y defendido, historia natural, civil, y geographica de este gran rio. Madrid 1745. (Segunda impression).

Habich. (See Larrabure i Correa.)

Hæbler, Ruth. Die geflochtenen Hängematten der Naturvölker Südamerikas. (Zeitschrift für Ethnologie. 51. Jahrgang. Berlin 1919.)

Handbook of American Indians. Washington 1907—1910.

Hawtrey, Seymour H. C. The Lengua Indians of the Paraguayan Chaco. (The Journal of the Anthropological Institute of Great Britain and Ireland. Vol 31. London 1901).

Herndon, W. M. Lewis. Exploration of the Valley of the Amazon. Washington 1854.

Hermessen, J. L. A Journey on the Rio Zamora, Ecuador. (The Geographical Review. New York 1917.)

5tNordenskiöld E-5,+(1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8

C Herrera, Antonio de. Historia General. Madrid 1730.

Ce 113 Herzog, Th. Vom Urwald zu den Gletschern der Kordillere. Stuttgart 1913.

Hornborstel. (See Koch-Grünberg 2).

(1) Ihering, Hermann, von. A civilisação prehistorica do Brazil meridional. (Revista do Museu Paulista, Vol. I. São Paulo 1895).

(4) — The Anthropology of the State of S. Paulo, Brazil. São Paulo 1906.

Jahn, A. Parauhanos und Guajiros und die Pfahlbauten am See von Maracaibo. (Zeitschrift für Ethnologie. 46. Jahrgang. Berlin 1914).

Jarque, Francisco. Ruiz Montoya en Indias. (Colección de libros raros y curiosos. T. 16—19. Madrid 1900). (First edition Zaragoza 1662).

Jornada de Omagua y Dorado. (Nueva biblioteca de autores españoles. T. 15. Madrid 1909).

Josselin de Jong, J. P. B., de. The Præcolumbian and early postcolumbian aboriginal population of Aruba, Curaçao and Bonaire. (Internationales Archiv für Ethnographie. Bd. 24. Leiden 1918).

Joyce, Thomas A. South American Archæology. London 1912.

(2) — Mexican Archæology. New York and London 1914.

Karsten, Rafael. Studies in South American Anthropology. I. Helsingfors 1920.

Kate, H. ten. (See Encyclopædie van Nederlandsch West-Indië.)

Keller-Leuzinger, Franz. Vom Amazonas und Madeira. Stuttgart 1874.

Kersten, Ludwig. Die Indianerstämme des Gran Chaco bis zum Ausgange des 18. Jahrhunderts. (Internationales Archiv für Ethnographie. Bd. 17 Leiden 1904).

(1) Kissenberth, Wilhelm. Bei den Canella-Indianern in Zentral-Maranhão (Brasilien). (Bæssler-Archiv. Bd. 2. Leipzig and Berlin 1911).

C
Ce
113

Knivet, Antonie. The admirable adventures and strange fortunes of Master Antonie Knivet, which went with Master Thomas Candish in his second voyage to the South Sea 1591. (Purchas. London 1625).

(2) Koch-Grünberg, Theodor. Zwei Jahre unter den Indianern. Berlin 1909—1910.

(3) — Indianerkinder. (Kosmos 1914).

(4) — Vom Roroima zum Orinoco. Erster Band. Berlin 1917.

(7) — Indianischer Handel. (Kosmos 1916).

Krause, Fritz. In den Wildnissen Brasiliens. Leipzig 1911.

Kunert. Rio grandenser Alterthümer. (Verhandlungen der Berliner Gesellschaft für Anthropologie, Ethnologie und Urgeschichte 1890. Berlin 1890).

Kunike, (Hugo). Ethnographisches und Archäologisches aus der Guayaqui-Region. (Amtliche Berichte aus den königlichen Kunstsammlungen. Jahrg. 32. Berlin 1911).

(4) Lafone Quevedo, Samuel. Catálogo descriptivo é ilustrado de las huacas de Chañar-Yaco. (Revista del Museo de la Plata. T. 3. La Plata 1892).

Lange, Algot. The lower Amazon. New York and London 1914.

Larrabure i Correa, Carlos. Coleccion de documentos oficiales referentes á Loreto. Lima 1905.

Lasch, Richard. Die verstümmlung der Zähne in America. (Sonderabdruck aus Band 31 der »Mitteilungen der Anthropologischen Gesellschaft in Wien.» Wien 1901).

(1) Latcham, R. E. Ethnology of the Araucanos. (The Journal of the Royal Anthropological Institute of Great Britain and Ireland. Vol. 34. London 1904).

Lehmann, Johannes. Die Pfahlbauten der Gegenwart. (Sonderabdruck aus Band 34 der »Mitteilungen der Anthropologischen Gesellschaft in Wien».) Wien 1904.

C
Ce
113

(1) Lehmann-Nitsche, Robert. Catálogo de las antigüedades de la Provincia de Jujuy, conservadas en el Museo de La Plata. (Revista del Museo de La Plata. T. XI. La Plata 1904).

(2) — Estudios Antropológicos sobre los Chiriguanos, Chorotes, Matacos y Tobas. (Anales del Museo de La Plata T. I. Segunda Serie. Buenos Aires 1908).

(4) — Botones labiales y discos auriculares de piedra. (De la Revista del Museo de La Plata, T. 23.)

Lery, Jean, de. Histoire d'un voyage fait en la terre de Bresil. Quatrième Edition. [Genéve] 1600.

L(evel), A(ndres) E. Informe sobre ... alto Orinoco, central y bajo Orinoco. Caracas 1850.

Litteræ Annuæ, Societatis iesv Anni 1589. Romae 1591.

Litteræ Annuæ, Societatis Iesu. Duorum annorum 1594—1595. Neapoli 1604.

Lizárraga, Reginaldo, de. Descripcion breve de toda la tierra del Perú, Tucumán, Rio de la Plata y Chile. Madrid 1909. (Nueva Biblioteca de Aútores Españoles. T. 15.) (Written 1605.)

Lombard. Lettre du P. Lombard sur la mission de Kourou. Mission de Cayenne. Paris 1857.

Lowe (See Smyth).

Lozano, Pedro. Descripcion chorográphica del terreno, rios, arboles y animales de las dilatadissimas provincias del gran Chaco, Gualamba: y de los ritos y costrumbes de las innumerables naciones bárbaras é infieles que le habitan. Cordoba 1733.

Luschan, F., von. Altertümer von Benin. Berlin 1919.

Magalhães, Pero, de. Tratado da terra do Brazil. (Collecção de noticias para a historia e geografia das nações ultramarinas. T. 4. Lisboa 1826). (First edition 1576).

Marbán, Pedro. Relacion de la Provincia de la Virgen del Pilar de Mojos. (Boletin de la Sociedad Geográfica de La Paz Bolivia 1898). (Written 1676).

C
Ce
113

MARCANO, G. Ethnographie précolombienne du Venezuela. (Mémoires de la Societé d'Anthropologie de Paris. T. 4. Paris 1889—1890).

MARKHAM, CLEMENTS. The Incas of Peru. London 1910.

[MARONI]. Noticias auténticas del famoso Rio Marañón. (Boletin de la Sociedad Geografica de Madrid. T. 26—33. Madrid 1889—1892). (Written about 1738).

(1) MARTIUS, CARL FRIEDRICH. Beiträge zur Ethnographie und Sprachenkunde Amerikas zumal Brasiliens. I. Ethnographie. Leipzig 1867.

(2) .... See v. SPIX.

MARTYR d'ANGHERA, PETER. De orbe novo. Translated from the Latin ... by Francis Augustus Mac Nutt. New York and London 1912.

(2) MASON, OTIS TUFTON. Aboriginal American Basketry. (Report of the U. S. National Museum. Washington 1904.)

MAYNTZHUSEN, F. C. Ueber vorkolumbianische Siedelungen und Urnenfriedhöfe der Guarani am Alto Paraná (Actas del 17° Congreso Internacional de Americanistas. Buenos Aires 1912.)

(1) MEAD, CHARLES W. The musical instruments of the Incas. (Supplement to American Museum Journal. Vol. 3. New York 1903).

MEANS, PHILIP AINSWORTH. A note on the Guarani invasions of the Inca Empire. (The Geographical Review. New York 1917).

(1) MEDINA, JOSE TORIBIO. Los aborijenes de Chile. Santiago 1882.

(2) — El Veneciano Sebastian Caboto al servicio de España. T. 1—2. Santiago de Chile 1908.

(1) MEYER, HERMANN. Bows and arrows in Central Brazil. (From the Smithsonian Report 1896. Washington 1898).

(2) — Muschelhügel (Sambaki) und Urnenfeld bei Laguna. (Brasilien). (Globus. Bd. 69. Braunschweig 1896).

Nordenskiöld E-6,8(1904-1908, 1913) 1920
SP10 Chiriguano SP10
Chaco SP8

C
Ce
113

Mocquet, Jean. Voyages en Afrique, Asie, Indes Orientales & occidentales faits par . . . Rouen 1645. (First Ed. Paris 1616).

Molina, Giovanni Ignazio. Saggio sulla storia civile del Chile. Bologna 1787.

Montesinos, Fernando. Memorias antiguas historiales y politicas del Perú. Madrid 1882 (Coleccion de libros españoles raros ó curiosos. T. 16). (Written 1642).

Muro (In Larrabure i Correa.)

Navarrete, Martin Fernandez, de. Coleccion de los viages. T. 3. Madrid 1829.

Nehring, Carl. Indianische Graburnen (Verhandlungen der Berliner Anthropologischen Gesellschaft. Berlin 1879).

(1) Netto, Ladislau. Investigações sobre a Archeologia Brazileira. (Archivos do Museu Nacional do Rio de Janeiro. Vol. 6. Rio de Janeiro 1885.)

Neveu-Lemaire, M. Los lagos de los altiplanos de la América del Sud. (Traduccion Española) La Paz 1909.

Nino, Bernardino, de. Etnografía Chiriguana. La Paz 1912.

Nobrega, Manoel, da. Informação das terras do Brazil mandada pelo Padre Nobrega. (Revista Trimensal. T. 6. Rio de Janeiro 1844.) (Written about 1550).

(2) Nordenskiöld, Erland. Beiträge zur Kenntnis einiger Indianerstämme des Rio Madre de Dios-Gebietes (Ymer. Årg. 25. Stockholm 1905).

(3) — Arkeologiska undersökningar i Perus och Bolivias gränstrakter 1904—1905. (Kungl. Svenska Vetenskapsakademiens Handlingar. Bd. 42. Uppsala and Stockholm 1906).

(3b) — Südamerikanische Rauchpfeifen. (Globus Bd. 93. Braunschweig 1908).

(6) — Spiele und Spielsachen im Gran Chaco und in Nordamerika. (Zeitschrift für Ethnologie. Jahrg. 42. Berlin 1910).

C
Ce
113

(7) — Sind die Tapiete ein guaranisierter Chacostamm? (Globus. Bd. 98. Braunschweig 1910).
(8a) — Indianlif i El Gran Chaco (Syd-Amerika). Stockholm 1910.
(8b) — Indianerleben. Leipzig 1912.
(9) — Indianer och hvita i nordöstra Bolivia. Stockholm 1911.
(10) — Urnengräber und Mounds im bolivianischen Flachlande. (Baessler-Archiv. Bd. 3. Leipzig und Berlin 1913).
(11) — Forskningar och äventyr i Sydamerika. Stockholm 1915.
(12) — Incallacta, eine befestigte und von Inca Tupac Yupanqui angelegte Stadt. Ymer. Årg. 35. Stockholm 1915.
(13) — The Guarani invasion of the Inca Empire in the sixteenth century: An historical Indian migration. (The Geographical Review. Vol. 4. New York 1917).
(15) — See Foldin.
(16) — Spieltische aus Peru und Ecuador. Zeitschrift für Ethnologie. Jahrg. 50. Berlin 1918.
(17) — Om Indianernas Anvendelse af Gummi i Sydamerika. (Geografisk Tidsskrift. København 1917).
NÚÑEZ CABEZA DE VACA, ALVAR. Relación de los naufragios y comentarios. Madrid 1906. (Colección de libros y documentos referentes á la historia de América. T. 5—6). (First edition Valladolid 1555).
(1) d'ORBIGNY, ALCIDE. Voyage. Partie Historique. Paris 1839.
ORDINAIRE, OLIVIER. Les sauvages du Pérou. (Revue d'Ethnographie. T. 6. Paris 1887).
ORTIGUERA, TORIBIO, DE. Jornada del Río Marañón. (Nueva biblioteca de autores españoles. T. 15. Madrid 1909). (Written about 1585).
OSCULATI, G. Esplorazione delle regioni equatoriali. Milano 1854.

C
CE
113

Oviedo y Baños, José, [illegible]. Historia de Venezuela. Madrid 1885. (First edition Madrid 1723).

Oviedo y Valdés, Gonzalo Fernandez, [illegible]. Historia general y natural de las Indias. Madrid 1851—55.

(4) Outes, Felix F. Arqueologia de San Blas. (Anales del Museo Nacional de Buenos Aires. T. 16. Buenos Aires 1907).

(5) — y Bruch, Carlos. Los aborígenes de la república Argentina. Buenos Aires 1910.

(7) — La Cerámica Chiriguana. (Revista del Museo de la Plata. Buenos Aires 1909).

(8) — Observaciones á dos estudios del Señor Eric Boman. (Anales de la Sociedad Científica Argentina. T. 60. Buenos Aires 1905).

(a) Oyarzun, Aureliano. Los Kjoekkenmoeddinger o conchales de las costas de Melipilla i Casablanca. Santiago de Chile 1910.

Palomino, Diego. Relacion de las provincias que hay en la conquista del Chuquimayo que yo el Capitan Diego Palomino tengo por Su Magestad y por el muy Ilustre Señor Pedro Gasca, presidente de la Audiencia Real destos reynos del Perú por su Magestad. (Relaciones geográficas de Indias T. 4. Madrid 1897). (Palomino made his journey in 1549).

Pastells Pablo. Historia de la Compañía de Jesús en la Provincia del Paraguay. T. 2. Madrid 1915.

Paula Souza, Geraldo H., [illegible]. Notas sobre uma visita a acampamentos de indios Caingang. (Revista do Museu Paulista. T. 10. São Paulo 1918).

Pigafetta, Antonio. Primer viaje alrededor del mundo. (Traducción del italiano por D. Manuel Walls y Merino). (Boletín de la Sociedad Geográfica de Madrid. T. 38. Madrid 1896).

Pittier de Fábrega, Henry. Ethnographic and linguistic notes on the Paez Indians of tierra adentro, Cauca, Colombia. (Memoirs of the American Anthropological Association. Vol. I. Lancaster 1907).

C
Ce
113

Pizarro, Pedro. Relacion del descubrimiento y conquista de los reinos del Perú. (Coleccion de documentos inéditos para la historia de España. T. 5. Madrid 1844).

Plassard, Louis. Les guaraounos et le delta de l'Orenoque. (Bulletin de la Societé de Géographie. T. 15. Paris 1868).

Poeppig, Eduard. Reise in Chile, Peru und auf dem Amazonenstrome. Leipzig 1835—1836.

Posnansky, Arthur. Das Treppenzeichen. Berlin 1913.

Preuss, Theodor. Die Begräbnisarten der Amerikaner und Nordostasiaten. Königsberg 1894.

Principio e origem dos Indios do Brasil. (Revista Trimensal. T. 57. Rio de Janeiro 1894).

Purchas his pilgrimes. London 1625. A treatise of Brazil written by a Portugall. (Manoel Tristão?)

Quandt, C. Nachricht von Suriname und seinen Einwohnern. Görlitz 1807.

Quintanilla, Juan N. Vargas. (In Carlos Larrabure i Correa).

Raimondi, A. Apuntes sobre la provincia litoral de Loreto. (In D. Mateo Paz Soldan. Geografia del Perú. Paris 1862).

Ralegh. The discovery of the Large, Rich, and Beautiful Empire of Guiana. London 1848. (Hakluyt Soc.)

Ramirez, Luiz. Carta, de . . . do Rio da Plata, a 10 de Julho de 1528. (Revista do Instituto Historico e Geographico do Brasil. T. 15. 2 Edicão. Rio de Janeiro 1888). (See also Medina (2).).

Ratzel, Friedrich. Völkerkunde. Bd. I. Leipzig und Wien 1894.

Regel, Fritz. Kolumbien. Berlin 1899.

Reiss, W. und Stübel. A. Das Todtenfeld von Ancon in Perú. Berlin 1880—1887.

Rengger, J. R. Reise nach Paraguay. (Herausgegeben von A. Rengger). Aarau 1835.

Restrepo, Vicente. Los Chibchas. Bogota 1895

C
ce
113

Restrepo Tirado. Ernesto. Los Quimbayas. Bogota 1912.

(1) Rivet, P. Les Indiens Jíbaros. (L'Anthropologie. T. 18—19. Paris 1907—1908).

(2) — Etude sur les indiens de la région de Riobamba. (Journal de la Société des Américanistes de Paris. Nouvelle série. T. I. Paris 1903).

(3) — Les indiens Colorados. (Journal de la Société des Américanistes de Paris. Nouvelle série. T. 2. Paris 1905).

(4) — et Verneau, R. Ethnographie ancienne de l'Équateur. (Mission du service géographique de l'armée pour la mesure d'un arc de méridien équatorial en Amérique du Sud. T. 6. Paris 1912).

(Robledo, Jorge). Relacion del viaje del capitan Jorge Robledo a las provincias de Ancerma y Quimbaya 1540. (Colleccion de documentos inéditos etc. T. 2. Madrid 1864).

Rodriguez, Manuel. El Marañon y Amazonas. Madrid1684.

Roosevelt, Theodore. Through the Brazilian Wilderness. London 1914.

(2) Roquette-Pinto, E. Rondonia. (Archivos do Museu Nacional. Bd. 20. Rio de Janeiro 1917).

(1) Rosen, Eric, von. The Chorotes Indians in the Bolivian Chaco. Stockholm 1904.

(2) — Archæological researches on the frontier of Argentina and Bolivia in 1901—1902. Stockholm 1904.

(3) — Är den sydamerikanska kulbågen en efterbildning av den indiska kullångbågen? Ymer 1919.

(4) — En förgången värld. Stockholm 1919.

Roteiro da viagem da cidade do Pará' etc. (Collecção de noticias . . . das nacões ultramarinas. T. 6. Lisboa 1856). (Witten about 1775.)

(3) Roth, Walter. Some Technological Notes from the Pomeroon District. (The Journal of the Royal Anthropological Institute Vol. 40. London 1910).

C
Ce
113

Ruiz Blanco, Matias. Conversión en Piritú. (Colección de libros raros curiosos que tratan de América. T. 7. Madrid 1892. (First Edition, Madrid 1590).

Ruiz de Montoya, Antonio. Conquista espiritual. Bilbao 1892. (First edition Madrid 1639).

Saabedra, Cristóbal, de. Suerte y calidades de los indios y modo de vivir que tienen; frutos y sustentos que da la tierra de los Maynas, que está reducida al servicio Real. Lima 1620. (Relaciones geográficas de indias. T. 4. Madrid 1897).

S:t Cricq, M., de. Voyage du Pérou au Brésil par les fleuves Ucayali et Amazone. (Bulletin de la Societé de Géographie. Paris 1853).

Salas, Julio, C. Etnología é Historia de Tierra Firme. Madrid (1908).

Salcamayhua, Joan de Santacruz Pachacuti Yamqui. Relacion de antigüedades desde Reyno del Pirú. (Tres relaciones de antigüedades peruanas. Madrid 1879). (Written about 1613).

Sánchez Labrador, José. El Paraguay católico. Buenos Aires, 1910. (Written 1770).

Sarmiento de Gamboa, Pedro. Geschichte des Inkareiches. (Abhandlungen der königlichen Gesellschaft der Wissenschaften zu Göttingen. Philologisch-Historische Klasse. Neue Folge. Bd. 4. Berlin 1906). (Herausgegeben von Richard Pietschmann).

Saville, Marshall, H. Contributions to South American Archeology. Vol. 1—2. New York 1907, 1910.

(1) Schmidel, Ulrich. Viaje al Rio de La Plata (1534—1554). (Notas bibliográficas y biográficas por Bartolomé Mitre. Prólogo, tradución y anotaciones por Samuel A. Lafone Quevedo. Biblioteca de la Junta de historia y numismática americana. T. I. Buenos Aires 1903).

(2) — Reise nach Süd-Amerika in den Jahren 1534 bis 1554. (Published by Valentin Langmantel.) Tübingen 1889

1C
ce
113

Schmidt, Max. Indianerstudien in Zentralbrasilien. Berlin 1905.

(4) — Die Paressi-Kabiši. (Baessler-Archiv. Bd. 4. Leipzig und Berlin 1914).

(7) — Über altperuanische Ornamentik. (Archiv für Anthropologie. Bd. 7. Braunschweig 1908).

Schmidt, P. W. Kulturkreise und Kulturschichten in Südamerika. Sonderabdruck aus der Zeitschrift für Ethnologie. Berlin 1913.

Schomburgk, Richard. Reisen in Britisch-Guiana. Leipzig 1847—1848.

Segura, Pedro de. (See Serrano y Sanz).

Sepp, A. Unterschiedliche Brief. (In Stöcklein. Der Neue Welt-Bott. Augsburg u. Grätz. 1728—1736)

Serrano y Sanz, Manuel. Los indios chiriguanaes. (Revista de archivos, bibliotecas y museos. T. 2. Madrid 1898).

(1) Simon, Pedro. Primera parte de las noticias historiales de las conquistas de tierra firme en las Indias occidentales. Parte I. Madrid 1627.

(2) — Noticias historiales de las conquistas de Tierra firme. Bogota 1882—1892.

Smyth, W. and Lowe, F. Narrative of a journey from Lima to Para. London 1836.

Snethlage, Emilia, A travessia entre o Xingú e. o. Tapajoz. (Boletim do Museu Goeldi. Vol. 7. Pará-Brazil 1913).

Soares de Souza, Gabriel. Tratado descriptivo do Brazil en 1587. (Revista trimensal. T. 14. Rio de Janeiro 1879).

Spinden, Herbert J. New data on the archæology of Venezuela. (Proceedings of the Nacional Academy of Sciences. Vol. 2. June 1916).

Spix, J. B. v. und Martius, K. F. Ph. v. Reise nach Brasilien. München 1823—1831.

(1) Staden, Hans. Warhafftig Historia vnnd beschreibung einer Landtschafft der Wilden, Nacketen, Grimmigen

C
Ce
113

Menschfresser Leuthen, in der Newen welt Amerika gelegen. Franckfurdt am Mayn [1557].

(2) — Suas Viagens etc. São Paulo 1900.

Stedman, J. G. Voyage a Surinam. (Traduit de l'Anglais, Paris. An 7 de la Repúblique.)

Steere, Joseph Beal. Narrative of a visit to Indian tribes of the Purus River, Brazil. (From the Report of the United States National Museum for 1901. Washington 1903).

(Stegelmann, Felix.) Die Indianer des Rio Envira. (Globus. Bd. 83. Braunschweig 1903).

(2) Steinen, K. von den. Durch Central-Brasilien. Leipzig 1886.

(3) — Unter den Naturvölkern Central-Brasiliens. Berlin 1894.

(5) — Diccionario Sipibo. Berlin 1904.

(6) — Ausgrabungen am Valenciasee. (Globus. Bd. 86. Braunschweig 1904).

Stradelli, E. Nell' Alto Orenoco. (Estratto dal Bollettino della Societá Geografica Italiana. Roma 1888).

Stübel. (Siehe Reiss).

Suarez de Cepeda, Juan. Relacion de los indios Colimas 1581. (Anales del Museo Nacional de Arqueologia. Tomo 4. Mexico 1913).

Techo, N. del. Historia Provinciæ Paraguariæ Societatis Jesu, etc., 1673 translation in Vol. 4 of Churchill's »A Collection of Voyages and Travels», London, 1732.

Teschauer, P. C. Die Caingang oder Coroados-Indianer in Brasilianischen Staate Rio Grande do Sul. (Anthropos. Bd. 9. St. Gabriel-Mödling bei Wien 1914).

(1) Therese, Prinzessin von Bayern. Meine Reise in den brasilianischen Tropen. Berlin 1897.

(2) — Reisestudien aus dem westlichen Südamerika. Berlin 1908.

(Texeira). Viaje del Capitán Pedro Texeira aguas arriba del Rio de las Amazonas. 1637—1638. (Bol. Soc. Geograf. T. 9, 13, 26. Madrid 1880, 1882 and 1889).

C
Ce
113

Thevet, André. Les singularités de la France antarctique Paris 1878. (First edition Paris 1558).

Thurn, Everard F. im. Among the Indians of Guiana. London 1883.

Tocantins, Antonio Manoel Gonçalves. Estudos sobre a tribu »Mundurucú«. (Revista trimensal. T. 40. Rio de Janeiro 1877).

Tolosa, Juan Perez, de. Cartas. (In Oviedo y Baños.) (Written 1546—1548).

(2) **Torres, Luis Maria.** Los primitivos habitantes del delta del Paraná. (Universidad Nacional de La Plata. Biblioteca centenaria. T. 4. Buenos Aires 1911).

Trista, Manoel. (See Purchas).

(1) **Uhle, Max.** Kultur und Industrie südamerikanischer Völker. Berlin 1889—1890.

(3) — Las relaciones prehistóricas entre el Peru y la Argentina. (Actas del 17 Congreso international de americanistas. Buenos Aires 1912).

(4) — Zur Chronologie der alten Culturen von Ica. (Journal de la Societé des Américanistes de Paris. Nouvelle série. T. 10. Paris 1913).

(4b) — Die Muschelhügel von Ancon, Peru. (International congress of Americanists. London 1912).

(5) — Los indios atacameños (Revista chilena de historia y geografía. T. 5. Santiago de Chile 1913).

(6) — Los aborigenes de Arica. (Impresión separada de las Publicaciones del Museo de Etnología y Antropología de Chile. Santiago de Chile 1917).

(9) — Ausgewählte Stücke des K. Museums für Völkerkunde zur Archäologie Americas. (Veröffentlichungen ... Museum für Völkerkunde. Bd. 1. Berlin 1889).

(10) — La Arqueologia de Arica y Tacna. (Boletin de la Sociedad Ecuatoriana de estudios históricos Americanos. V. 3. Quito 1919).

Ullrich, C. O. Die Tapes. (Internationaler Amerikanisten Kongress 1904. Stuttgart 1905).

C
Ce
113

URICOECHEA, EZEQUIEL. Vocabulario Paez-Castellano. (Collection linguistique americaine. T. 2. Paris 1877).

VAAS DE CAMINHA, PEDRO. Carta de . . . (Collecçao de noticias para a historia e geografia das nações ultramarinas. T. 4. Lisboa 1826). (Written 1500).

VASCONCELLOS, SIMÃO, DE. Chronica da companhia de Jesu do estado do Brasil. Lisboa 1865. (First edition Lisboa 1663).

VERISSIMO, JOSÉ. As populações indigenas e mestiças da Amazonia. (Revista trimensal. T. 50. Rio de Janeiro 1887).

VERNEAU. (See RIVET).

VIEDMA, FRANCISCO, DE. Descripcion de la Provincia de Santa Cruz de la Sierra. (Coleccion Angelis T. 3. Buenos Aires 1836). (Written 1793).

VOGT, P. FR. Die Indianer des obern Paraná. (Mitteilungen der Anthropologischen Gesellschaft in Wien. Bd. 34. Wien 1904).

WÆHNELDT, RODOLFO. Exploração da provincia de Mato Grosso. (Revista trimensal. T. 27. Rio de Janeiro 1864).

WAITZ, TH. Anthropologie der Naturvölker. T. III. Leipzig 1862.

WALLACE, ALFRED RUSSEL. Travels on the Amazon and Rio Negro. London 1889.

WEDDEL, H. A. Voyage dans le Nord de la Bolivia. Paris and London 1853.

WHIFFEN, THOMAS. The north-west Amazons. London. 1915.

WISSLER, CLARK. The American Indian. New York 1917.

WIED-NEUWIED, MAXIMILIAN. Reise nach Brasilien in den Jahren 1815 bis 1817. Frankfurt a. M., 1820—1821.

WIENER, CHARLES. Pérou et Bolivie. Paris 1880.

C Ce 113

XEREZ, FRANCISCO, DE. Conquista del Perú. Madrid 1891. (Coleccion de libros que tratan de America raros ó curiosos. T. I). (First edition Sevilla 1534).

YVES, D'EVREUX. Voyage dans le nord du Bresil, fait durant les années 1613 et 1614. Leipzig & Paris 1864. Edited by M. Ferdinand Denis.

Notes on the Bibliographical maps.

S
C
Ce
113
114
128
102

To this bibliography several maps have been added which ought to prove useful from many points of view. *The maps indicate the territories concerning which the authors quoted in parts 1 and 2 made their investigations.*

The first map shows the literature from 1498—1600, the second from 1600—1700, the third from 1700—1800, the fourth from 1800—1900 and the fifth from 1900—1920. We find a separate map of the archæological literature. Several important works are unfortunately missing which I have not been able to study. It is difficult and expensive work to collect the literature on the S. American Indians. Not the least difficult of access are certain works printed in S. America during the 19th century. For my ethno-geographical studies I have of course read a number of books without finding anything to quote from them and consequently they are not mentioned here. I desired especially to show the merits and demerits of the maps of the distribution of the cultural elements here published. The maps of the authors' names show us the districts from which I have no material at all and those from which I only have the material of older authors, or only of modern writers.

Some authors have not travelled in the territories they have written about, but have drawn from the works of several other authors. The most remarkable existant work of this kind is COOPER's excellent work on all that has been written about the Indian tribes in southernmost S. America. If there were many such compilations, it would not be difficult to draw up maps of the distribution of the various cultural elements.

From the map that indicates about which districts the archeological treatises are written, we can see, even though

S
C
Ce
113
114
128
102

some names are missing, what immense territories in S. America are still entirely unexplored archeologically.

The bibliography includes some authors whose names will not be found in the maps, i. e. FRIEDERICI and PATER SCHMIDT, great as their services to the ethnography of S. America have been. This is because they have written comprehensive works dealing with the ethnography of the whole continent, and not with any particular part of it.

When I have quoted from several works by the same author, these are numbered 1, 2, 3, etc. in the bibliography. The same work has the same number in the First and Second Parts of my own book.

5:Nordenskiöld E-5,H (1908-1909, 1913) 1920

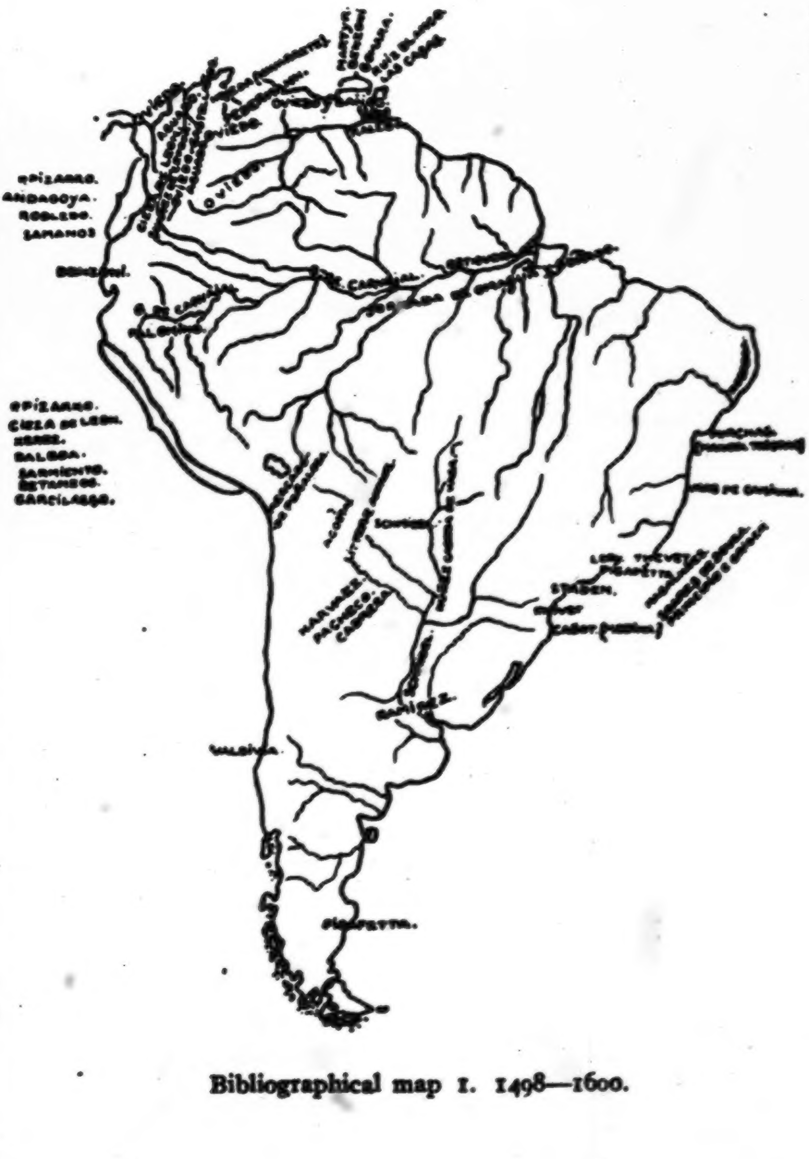
SF10 Chiriguano SF10

Chane SF8

South American Indians S3

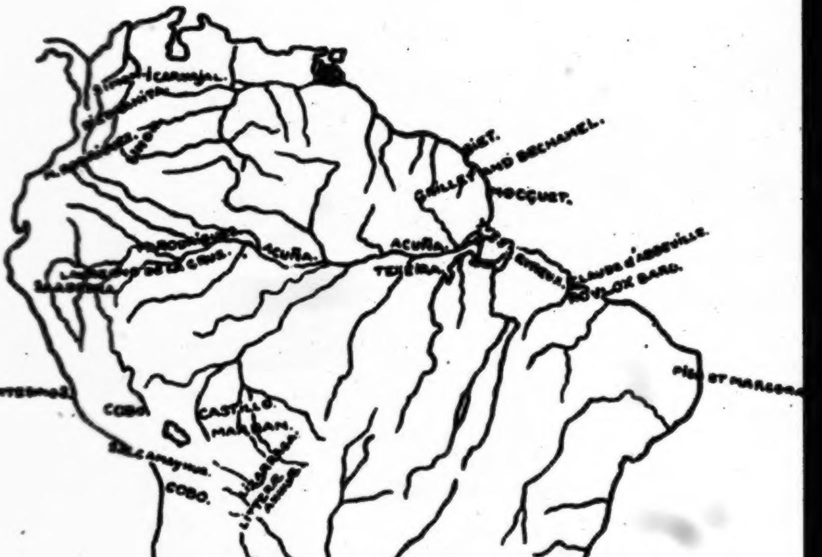
239

S
C
Ce
102
113


PIZARRO.
ANDAGOYA.
ROBLEDO.
SAMANOS
BENZONI.
OVIEDO.
OVIEDO
LAS CASAS
G. DE CARVAJAL.
PIZARRO.
CIEZA DE LEON.
XERES.
BALBOA.
SARMIENTO.
BETANZOS.
GARCILASSO.
NARVAEZ.
PACHECO.
CABRERA
RAMIREZ.
VALDIVIA.
PIGAFETTA.
STADEN.

Bibliographical map I. 1498—1600.

S
C
Ce
1D2
113


CARVAJAL.
ACUÑA.
ACUÑA.
TEIXEIRA.
CRUZ.
MONTESINOS.
COBO.
CASTILLO.
MARBAN.
COBO.
GRILLET AND BECHAMEL.
CLAUDE D'ABBEVILLE.
ROULOX BARO.
ET MARCGR

Bibliographical map 2. 1600—1700.

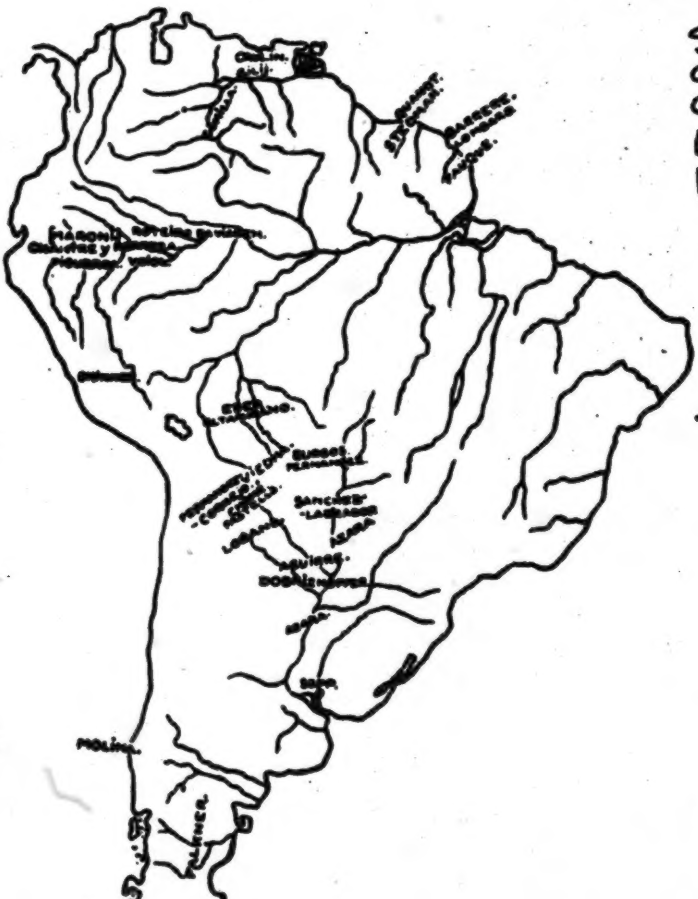
StNordenskiöld E-5,4(1908-1909, 1913) 1920

SF10 Chiriguano SF10

Chane SF8

South American Indians S3

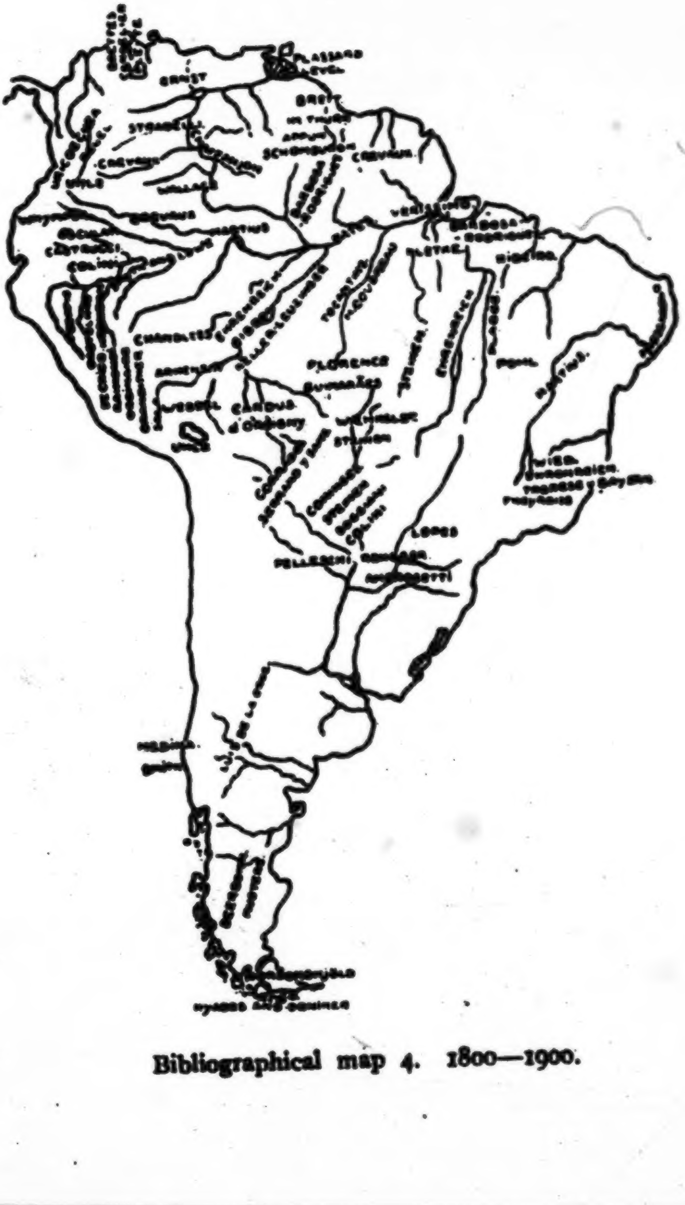
S
C
Ce
102
113



GILIJ.
BARRERE.
MARONI.
SANCHEZ -LABRADOR
AZARA.
AGUIRRE.
DOBRIZHOFFER.
LOZANO.
MOLINA.
FALKNER.

Bibliographical map 3. 1700—1800.

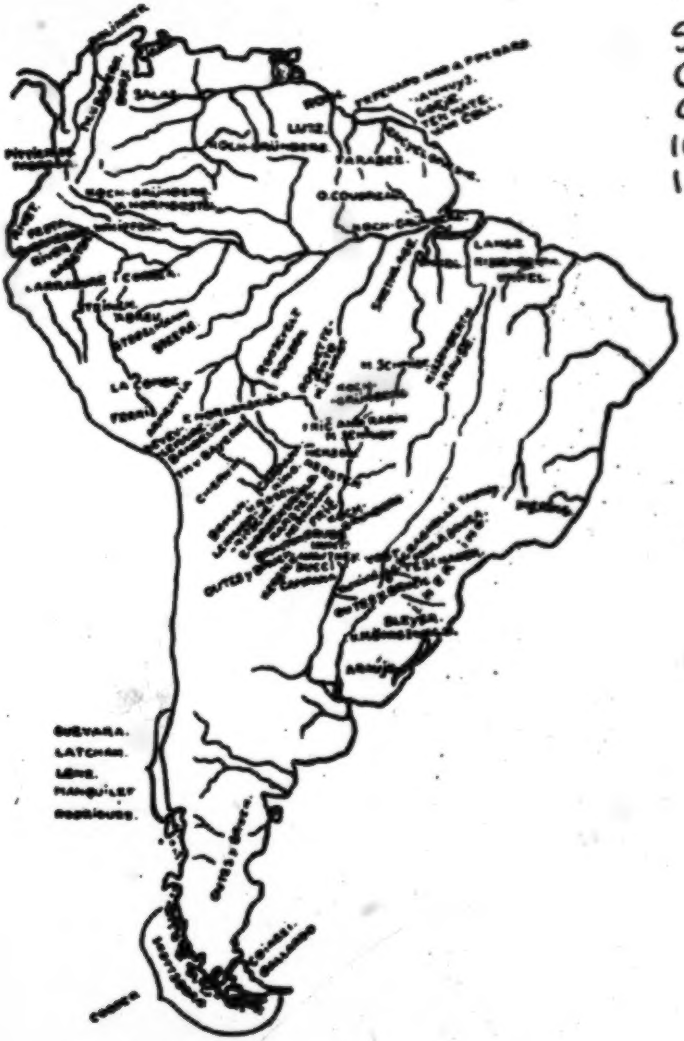
S
C
Ce
102
113


PLASSARD
ERNST
CREVAUX
SCHOMBURGK
CHANDLESS
FLORENCE
CASTELNAU
d'Orbigny
STEINEN
LOPES
WIED
PELLESCHI
AMBROSETTI
NORDENSKIÖLD
HYADES AND DENIKER

Bibliographical map 4. 1800—1900.

5tNordenskiöld E-5,4(1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8
South American Indians 53

S
C
Ce
102
113


SALAS.
LUTZ.
KOCH-GRÜNBERG.
FARABEE.
O. COUDREAU.
KOCH-GRÜNBERG.
LANGE.
LA CONDE.
GUEVARA.
LATCHAM.
LENZ.
MANQUILEF

Bibliographical map 5. 1900—1920.

SI Nordenskiöld E-3j(1908-1909, 1912) 1920
SF10 Chiriguano SF10
Chane SF6
South American Indians 59

244

S
C
Ce
102
113
172

Bibliographical map 6. Archæological literature.

Nordenskiöld E-5,1(1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8

OSD

ERRATA.

Page 23 l. 6 from the bottom in note, read See SERRANO y SANZ
P. 328 *for* P. 326.
" 97 l. 6 " " " read P. 241 *for* P. 141
" 133 l. 7 " " " " 58 *for* 59.
" 144 l. 1 " " top, read lips in rims *for* spouts.
" 191. read Fig. 58 *for* Fig. 38.

171

/For information on the distribution of Chiriguano and Chané material culture throughout the Chaco area and South America as a whole, see category 116, pp. 2-22, 25-47, 51-68, 71-81, 84-92, 95-98, 101-122, 125-146, 164-179, and 182-195./

6-

S: Nordenskiöld SF10 Chiriguano SF10
Chaco SF5

102, 113

/Bibliographical maps 1-4 appearing on pp. 239-244 of this source (see category 116), show the general span of ethnographic coverage by the various authors listed in the bibliography during specific time periods. A further explanation of these maps will be found on pp. 237-238./